

# INSTRUCTOR'S SOLUTIONS MANUAL

## Byrd & Chen's Canadian Tax Principles 2015 - 2016 Edition

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### Problem Concordance

A concordance of the problems in the 2014/15 vs. 2015/16 editions is available after the Problem Listing to assist instructors who have previously used *Canadian Tax Principles*.

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### Bookmarks In PDF File

To assist you in navigating through the electronic version of this solutions manual, there are bookmarks on the first page of each Assignment Problem solution.

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## **Assignment Problems Listing and Description**

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Next to each problem number you will find a general indication as to whether we think the problem is: Easy (E), Medium (M), or Difficult (D).

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	<b>SS = Self Study</b>		<b>AP = Assignment Prob.</b>		<b>TIF = Test Item File</b>	
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	SS 6-4	SS 6-4	AP 6-4	AP 6-4	TIF 6-4	TIF 6-4
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	SS 6-6	SS 6-6	AP 6-6	AP 6-6	TIF 6-5B	TIF 6-5B
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	SS 6-16	SS 6-16			TIF 6-15	TIF 6-14
					TIF 6-16	TIF 6-15
Supplementary	SSS 6-1	SSS 6-1			TIF 6-17	TIF 6-16
Self Study (SSS)	SSS 6-2	SSS 6-2			TIF 6-18	AP 6-12
	SSS 6-3	SSS 6-3			TIF 6-19	TIF 6-18
	SSS 6-4	SSS 6-4				
	SSS 6-5	SSS 6-5				
	SSS 6-6	TIF 6-18				

This Problem Concordance shows the problem number in the 2014/15 edition in grey type and the number of the updated problem in the 2015/16 (New) edition in bold.

	<b>SS = Self Study</b>		<b>AP = Assignment Prob.</b>		<b>TIF = Test Item File</b>	
	2015/16	2014/15	2015/16	2014/15	2015/16	2014/15
<b>Chap 7</b>						
	SS 7-1	SS 7-1	AP 7-1	AP 7-1	TIF 7-1	TIF 7-1
	SS 7-2	SS 7-2	AP 7-2	<b>New</b>	TIF 7-2	TIF 7-2
	SS 7-3	SS 7-3	AP 7-3	AP 7-3	TIF 7-3	TIF 7-3
	SS 7-4	SS 7-4	AP 7-4	AP 7-4	TIF 7-4	TIF 7-4
	SS 7-5	SS 7-5	AP 7-5	AP 7-5	TIF 7-5A	TIF 7-5A
	SS 7-6	SS 7-6	AP 7-6	AP 7-6	TIF 7-5B	TIF 7-5B
	SS 7-7	SS 7-7	AP 7-7	<b>New</b>	TIF 7-6	TIF 7-6
	SS 7-8	SS 7-8	AP 7-8	<b>New</b>	TIF 7-7	AP 7-2
	SS 7-9	SS 7-9	AP 7-9	AP 7-9	TIF 7-8	TIF 7-8
					TIF 7-9	TIF 7-9
					TIF 7-10	TIF 7-10
Supplementary	SSS 7-1	SSS 7-1			TIF 7-11	TIF 7-11
Self Study (SSS)	SSS 7-2	TIF 7-7			TIF 7-12	TIF 7-12
	SSS 7-3	SSS 7-2			TIF 7-13	AP 7-7
	SSS 7-4	SSS 7-3			TIF 7-14	TIF 7-14
	SSS 7-5	SSS 7-4			TIF 7-15	AP 7-8
					TIF 7-16	TIF 7-16
<b>Chap 8</b>						
	SS 8-1	SS 8-1	AP 8-1	<b>New</b>	TIF 8-1	TIF 8-1
	SS 8-2	SS 8-2	AP 8-2	AP 8-2	TIF 8-2	TIF 8-2
	SS 8-3	SS 8-3	AP 8-3	AP 8-3	TIF 8-3	TIF 8-3
	SS 8-4	SS 8-4	AP 8-4	<b>New</b>	TIF 8-4	TIF 8-4
	SS 8-5	SS 8-5	AP 8-5	AP 8-5	TIF 8-5A	TIF 8-5A
	SS 8-6	SS 8-6	AP 8-6	AP 8-6	TIF 8-5B	TIF 8-5B
	SS 8-7	SS 8-7	AP 8-7	AP 8-7	TIF 8-6	AP 8-1
	SS 8-8	SS 8-8	AP 8-8	AP 8-8	TIF 8-7	TIF 8-7
	SS 8-9	SS 8-9	AP 8-9	AP 8-9	TIF 8-8	TIF 8-8
	SS 8-10	SS 8-10	AP 8-10	<b>New</b>	TIF 8-9	AP 8-4
	SS 8-11	SS 8-11	AP 8-11	AP 8-11	TIF 8-10	TIF 8-10
	SS 8-12	SS 8-12	AP 8-12	AP 8-12	TIF 8-11	TIF 8-11
	SS 8-13	SS 8-13	AP 8-13	<b>New</b>	TIF 8-12	TIF 8-12
	SS 8-14	SS 8-14	AP 8-14	AP 8-14	TIF 8-13	TIF 8-13
	SS 8-15	SS 8-15	AP 8-15	<b>New</b>	TIF 8-14	AP 8-10
	SS 8-16	SS 8-16	AP 8-16	AP 8-16	TIF 8-15	TIF 8-15
	SS 8-17	SS 8-17			TIF 8-16	TIF 8-16
	SS 8-18	SS 8-18			TIF 8-17	AP 8-13
					TIF 8-18	TIF 8-18
Supplementary	SSS 8-1	SSS 8-1			TIF 8-19	TIF 8-19
Self Study (SSS)	SSS 8-2	SSS 8-2			TIF 8-20	AP 8-15
	SSS 8-3	SSS 8-3			TIF 8-21	TIF 8-21
	SSS 8-4	SSS 8-4				
	SSS 8-5	SSS 8-5				
	SSS 8-6	SSS 8-6				
	SSS 8-7	SSS 8-7				
	SSS 8-8	SSS 8-8				
	SSS 8-9	TIF 8-17				

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	<b>SS = Self Study</b>		<b>AP = Assignment Prob.</b>		<b>TIF = Test Item File</b>	
<b>Chap 9</b>	<b>2015/16</b>	<b>2014/15</b>	<b>2015/16</b>	<b>2014/15</b>	<b>2015/16</b>	<b>2014/15</b>
	SS 9-1	SS 9-1	AP 9-1	AP 9-1	TIF 9-1	TIF 9-1
	SS 9-2	SS 9-2	AP 9-2	AP 9-2	TIF 9-2	TIF 9-2
	SS 9-3	SS 9-3	AP 9-3	New	TIF 9-3	TIF 9-3
	SS 9-4	SS 9-4	AP 9-4	New	TIF 9-4	TIF 9-4
	SS 9-5	SS 9-5	AP 9-5	AP 9-5	TIF 9-5A	TIF 9-5A
	SS 9-6	SS 9-6	AP 9-6	New	TIF 9-5B	TIF 9-5B
	SS 9-7	SS 9-7	AP 9-7	AP 9-7	TIF 9-6	TIF 9-6
	SS 9-8	SS 9-8	AP 9-8	AP 9-8	TIF 9-7	TIF 9-7
	SS 9-9	SS 9-9	AP 9-9	New	TIF 9-8	TIF 9-8
	SS 9-10	SS 9-10	AP 9-10	AP 9-10	TIF 9-9	TIF 9-9
	SS 9-11	SS 9-11	AP 9-11	AP 9-11	TIF 9-10	TIF 9-10
	SS 9-12	SS 9-12	AP 9-12	New	TIF 9-11	AP 9-4
	SS 9-13	SS 9-13	AP 9-13	AP 9-13	TIF 9-12	TIF 9-11
	SS 9-14	SS 9-14			TIF 9-13	AP 9-6
					TIF 9-14	TIF 9-13
	SSS 9-1	SSS 9-1			TIF 9-15	TIF 9-14
Supplementary	SSS 9-2	SSS 9-2			TIF 9-16	TIF 9-15
Self Study (SSS)	SSS 9-3	SSS 9-3			TIF 9-17	AP 9-9
	SSS 9-4	SSS 9-4			TIF 9-18	TIF 9-16
	SSS 9-5	SSS 9-5			TIF 9-19	TIF 9-17
					TIF 9-20	TIF 9-18
<b>Chap 10</b>	<b>2015/16</b>	<b>2014/15</b>	<b>2015/16</b>	<b>2014/15</b>	<b>2015/16</b>	<b>2014/15</b>
	SS 10-1	SS 10-1	AP 10-1	New	TIF 10-1	TIF 10-1
	SS 10-2	SS 10-2	AP 10-2	AP 10-2	TIF 10-2	TIF 10-2
	SS 10-3	SS 10-3	AP 10-3	New	TIF 10-3	TIF 10-3
	SS 10-4	SS 10-4	AP 10-4	AP 10-4	TIF 10-4	TIF 10-4
	SS 10-5	SS 10-5	AP 10-5	AP 10-5	TIF 10-5A	TIF 10-5A
	SS 10-6	SS 10-6	AP 10-6	AP 10-6	TIF 10-5B	TIF 10-5B
	SS 10-7	SS 10-7	AP 10-7	AP 10-7	TIF 10-6	AP 10-1
	SS 10-8	SS 10-8	AP 10-8	New	TIF 10-7	TIF 10-7
	SS 10-9	SS 10-9	AP 10-9	AP 10-9	TIF 10-8	AP 10-3
	SS 10-10	SS 10-10			TIF 10-9	TIF 10-9
					TIF 10-10	TIF 10-10
					TIF 10-11	TIF 10-11
Supplementary	SSS 10-1	TIF 10-6			TIF 10-12	TIF 10-12
Self Study (SSS)	SSS 10-2	TIF 10-8			TIF 10-13	TIF 10-13
	SSS 10-4	SSS 10-1			TIF 10-14	TIF 10-14
	SSS 10-5	SSS 10-2			TIF 10-15	TIF 10-15
					TIF 10-16	AP 10-8
<b>Chap 11</b>	<b>2015/16</b>	<b>2014/15</b>	<b>2015/16</b>	<b>2014/15</b>	<b>2015/16</b>	<b>2014/15</b>
	SS 11-1	SS 11-1	AP 11-1	New	TIF 11-1	TIF 11-1
	SS 11-2	SS 11-2	AP 11-2	AP 11-2	TIF 11-2	TIF 11-2
	SS 11-3	AP 11-4	AP 11-3	AP 11-3	TIF 11-3	TIF 11-3
	SS 11-4	SS 11-4	AP 11-4	AP 11-4	TIF 11-4	TIF 11-4
	SS 11-5	SS 11-5	AP 11-5	AP 11-5	TIF 11-5A	TIF 11-5A
	SS 11-6	SS 11-6	AP 11-6	New	TIF 11-5B	TIF 11-5B
	SS 11-7	SS 11-7	AP 11-7	AP 11-7	TIF 11-6	AP 11-1
	SS 11-8	SS 11-8	AP 11-8	AP 11-8	TIF 11-7	TIF 11-7
	SS 11-9	SS 11-9	AP 11-9	AP 11-9	TIF 11-8	TIF 11-8
	SS 11-10	SS 11-10	AP 11-10	New	TIF 11-9	TIF 11-9
	SS 11-11	SS 11-11	TS AP 11-1	TS AP 11-1	TIF 11-10	TIF 11-10
	TS SS 11-1	TS SS 11-1	TS AP 11-2	TS AP 11-2	TIF 11-11	TIF 11-11
			TS AP 11-3	TS AP 11-3	TIF 11-12	TIF 11-12
Supplementary	SSS 11-1	SSS 11-1			TIF 11-13	TIF 11-13
Self Study (SSS)	SSS 11-2	SSS 11-2			TIF 11-14	TIF 11-14
	SSS 11-3	SSS 11-3				
	SSS 11-4	SSS 11-4				

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	<b>SS = Self Study</b>		<b>AP = Assignment Prob.</b>		<b>TIF = Test Item File</b>	
	2015/16	2014/15	2015/16	2014/15	2015/16	2014/15
<b>Chap 12</b>						
	SS 12-1	SS 12-1	AP 12-1	AP 12-1	TIF 12-1	TIF 12-1
	SS 12-2	SS 12-2	AP 12-2	AP 12-2	TIF 12-2	TIF 12-2
	SS 12-3	SS 12-3	AP 12-3	AP 12-3	TIF 12-3	TIF 12-3
	SS 12-4	SS 12-4	AP 12-4	AP 12-4	TIF 12-4	TIF 12-4
	SS 12-5	SS 12-5	AP 12-5	AP 12-5	TIF 12-5A	TIF 12-5A
	SS 12-6	SS 12-6	AP 12-6	AP 12-6	TIF 12-5B	TIF 12-5B
	SS 12-7	SS 12-7	AP 12-7	AP 12-7	TIF 12-6	TIF 12-6
	SS 12-8	SS 12-8	AP 12-8	AP 12-8	TIF 12-7	TIF 12-7
	SS 12-9	SS 12-9	AP 12-9	AP 12-9	TIF 12-8	TIF 12-8
	SS 12-10	SS 12-10	AP 12-10	<b>New</b>	TIF 12-9	TIF 12-9
					TIF 12-10	TIF 12-10
					TIF 12-11	TIF 12-11
					TIF 12-12	TIF 12-12
Supplementary	SSS 12-1	SSS 12-1			TIF 12-13	TIF 12-13
Self Study (SSS)	SSS 12-2	SSS 12-2			TIF 12-14	TIF 12-14
	SSS 12-3	SSS 12-3			TIF 12-15	TIF 12-15
	SSS 12-4	SSS 12-4			TIF 12-16	TIF 12-16
		TIF 12-17			TIF 12-17	AP 12-10
<b>Chap 13</b>						
	SS 13-1	SS 13-1	AP 13-1	AP 13-1	TIF 13-1	TIF 13-1
	SS 13-2	SS 13-2	AP 13-2	AP 13-2	TIF 13-2	TIF 13-2
	SS 13-3	SS 13-3	AP 13-3	<b>New</b>	TIF 13-3	TIF 13-3
	SS 13-4	SS 13-4	AP 13-4	<b>New</b>	TIF 13-4	TIF 13-4
	SS 13-5	SS 13-5	AP 13-5	AP 13-5	TIF 13-5A	TIF 13-5A
	SS 13-6	SS 13-6	AP 13-6	AP 13-6	TIF 13-5B	TIF 13-5B
	SS 13-7	SS 13-7	AP 13-7	AP 13-7	TIF 13-6	TIF 13-6
			AP 13-8	AP 13-8	TIF 13-7	TIF 13-7
					TIF 13-8	TIF 13-8
Supplementary	SSS 13-1	SSS 13-1			TIF 13-9	AP 13-3
Self Study (SSS)	SSS 13-2	SSS 13-2			TIF 13-10	TIF 13-10
	SSS 13-3	TIF 13-9			TIF 13-11	TIF 13-11
	SSS 13-4	SSS 13-3			TIF 13-12	TIF 13-12
	SSS 13-5	TIF 13-13			TIF 13-13	AP 13-4
					TIF 13-14	TIF 13-14
<b>Chap 14</b>						
	SS 14-1	SS 14-1	AP 14-1	<b>New</b>	TIF 14-1	TIF 14-1
	SS 14-2	SS 14-2	AP 14-2	AP 14-2	TIF 14-2	TIF 14-2
	SS 14-3	SS 14-3	AP 14-3	<b>New</b>	TIF 14-3	TIF 14-3
	SS 14-4	SS 14-4	AP 14-4	AP 14-4	TIF 14-4	TIF 14-4
	SS 14-5	SS 14-5	AP 14-5	<b>New</b>	TIF 14-5A	TIF 14-5A
	SS 14-6	SS 14-6	AP 14-6	<b>New</b>	TIF 14-5B	TIF 14-5B
	SS 14-7	SS 14-7	AP 14-7	<b>New</b>	TIF 14-6	TIF 14-6
	SS 14-8	SS 14-8	AP 14-8	AP 14-8	TIF 14-7	AP 14-1
			TS AP 14-1	TS AP 14-1	TIF 14-8	AP 14-2
Supplementary	SSS 14-1	TIF 14-7			TIF 14-9	TIF 14-9
Self Study (SSS)	SSS 14-2	TIF 14-8			TIF 14-10	AP 14-5
	SSS 14-3	TIF 14-10			TIF 14-11	AP 14-6
	SSS 14-4	TIF 14-11			TIF 14-12	AP 14-7
					TIF 14-13	TIF 14-12

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	<b>SS = Self Study</b>		<b>AP = Assignment Prob.</b>		<b>TIF = Test Item File</b>	
	<b>2015/16</b>	2014/15	<b>2015/16</b>	2014/15	<b>2015/16</b>	2014/15
<b>Chap 15</b>						
	SS 15-1	SS 15-1	AP 15-1	AP 15-1	TIF 15-1	TIF 15-1
	SS 15-2	SS 15-2	AP 15-2	AP 15-2	TIF 15-2	TIF 15-2
	SS 15-3	SS 15-3	AP 15-3	New	TIF 15-3	TIF 15-3
	SS 15-4	SS 15-4	AP 15-4	New	TIF 15-4	TIF 15-4
	SS 15-5	SS 15-5	AP 15-5	AP 15-5	TIF 15-5A	TIF 15-5A
	SS 15-6	SS 15-6	AP 15-6	AP 15-6	TIF 15-5B	TIF 15-5B
	SS 15-7	SS 15-7	AP 15-7	AP 15-7	TIF 15-6	TIF 15-8
	SS 15-8	AP 15-8	AP 15-8	New	TIF 15-7	TIF 15-7
	SS 15-9	SS 15-8	AP 15-9	AP 15-9	TIF 15-8	AP 15-3
	SS 15-10	SS 15-9	AP 15-10	AP 15-10	TIF 15-9	AP 15-4
					TIF 15-10	TIF 15-10
Supplementary Self Study (SSS)	SSS 15-1	SSS 15-1			TIF 15-11	TIF 15-11
	SSS 15-2	SSS 15-2			TIF 15-12	TIF 15-12
	SSS 15-3	SSS 15-3			TIF 15-13	TIF 15-13
	SSS 15-4	SSS 15-4			TIF 15-14	TIF 15-14
	SSS 15-5	SSS 15-5			TIF 15-15	TIF 15-15
					TIF 15-16	TIF 15-16
<b>Chap 16</b>	<b>2015/16</b>	2014/15	<b>2015/16</b>	2014/15	<b>2015/16</b>	2014/15
	SS 16-1	SS 16-3	AP 16-1	AP 16-1	TIF 16-1	TIF 16-1
	SS 16-2	SS 16-4	AP 16-2	AP 16-2	TIF 16-2	TIF 16-2
	SS 16-3	SS 16-5	AP 16-3	AP 16-3	TIF 16-3	TIF 16-3
	SS 16-4	SS 16-6	AP 16-4	AP 16-4	TIF 16-4	TIF 16-4
	SS 16-5	SS 16-2	AP 16-5	New	TIF 16-5A	TIF 16-5A
	SS 16-6	SS 16-1	AP 16-6	AP 16-6	TIF 16-5B	TIF 16-5B
	SS 16-7	SS 16-7	AP 16-7	AP 16-7	TIF 16-6	TIF 16-6
	SS 16-8	SS 16-8	AP 16-8	AP 16-8	TIF 16-7	TIF 16-7
	SS 16-9	SS 16-9	AP 16-9	New	TIF 16-8	AP 16-5
	SS 16-10	SS 16-10	AP 16-10	New	TIF 16-9	TIF 16-9
	SS 16-11	SS 16-11	AP 16-11	AP 16-11	TIF 16-10	TIF 16-10
			AP 16-12	AP 16-12	TIF 16-11	TIF 16-11
			AP 16-13	New	TIF 16-12	TIF 16-12
Supplementary Self Study (SSS)	SSS 16-1	TIF 16-8			TIF 16-13	TIF 16-13
	SSS 16-2	TIF 16-14			TIF 16-14	AP 16-9
	SSS 16-3	TIF 16-16			TIF 16-15	AP 16-10
					TIF 16-16	TIF 16-15
					TIF 16-17	AP 16-13
<b>Chap 17</b>	<b>2015/16</b>	2014/15	<b>2015/16</b>	2014/15	<b>2015/16</b>	2014/15
	SS 17-1	SS 17-1	AP 17-1	New	TIF 17-1	TIF 17-1
	SS 17-2	SS 17-2	AP 17-2	New	TIF 17-2	TIF 17-2
	SS 17-3	SS 17-3	AP 17-3	New	TIF 17-3	TIF 17-3
	SS 17-4	SS 17-4	AP 17-4	AP 17-4	TIF 17-4	TIF 17-4
	SS 17-5	SS 17-5	AP 17-5	AP 17-5	TIF 17-5A	TIF 17-5A
	SS 17-6	SS 17-6	AP 17-6	AP 17-6	TIF 17-5B	TIF 17-5B
	SS 17-7	SS 17-7	AP 17-7	AP 17-7	TIF 17-6	AP 17-1
	SS 17-8	SS 17-8	AP 17-8	AP 17-8	TIF 17-7	AP 17-2
			AP 17-9	New	TIF 17-8	TIF 17-8
					TIF 17-9	AP 17-3
Supplementary Self Study (SSS)	SSS 17-1	TIF 17-6			TIF 17-10	TIF 17-10
	SSS 17-2	TIF 17-7			TIF 17-11	TIF 17-11
	SSS 17-3	TIF 17-9			TIF 17-12	TIF 17-12
	SSS 17-4	TIF 17-13			TIF 17-13	AP 17-9

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	<b>SS = Self Study</b>		<b>AP = Assignment Prob.</b>		<b>TIF = Test Item File</b>	
	<b>2015/16</b>	2014/15	<b>2015/16</b>	2014/15	<b>2015/16</b>	2014/15
<b>Chap 18</b>						
	SS 18-1	SS 18-1	AP 18-1	AP 18-1	TIF 18-1	TIF 18-1
	SS 18-2	SS 18-2	AP 18-2	AP 18-2	TIF 18-2	TIF 18-2
	SS 18-3	SS 18-3	AP 18-3	AP 18-3	TIF 18-3	TIF 18-3
	SS 18-4	SS 18-4	AP 18-4	New	TIF 18-4	TIF 18-4
	SS 18-5	SS 18-5	AP 18-5	AP 18-5	TIF 18-5A	TIF 18-5A
	SS 18-6	SS 18-6	AP 18-6	New	TIF 18-5B	TIF 18-5B
	SS 18-7	SS 18-7	AP 18-7	New	TIF 18-6	TIF 18-6
	SS 18-8	SS 18-8	AP 18-8	New	TIF 18-7	TIF 18-7
			AP 18-9	AP 18-9	TIF 18-8	AP 18-4
			AP 18-10	AP 18-10	TIF 18-9	TIF 18-9
Supplementary	SSS 18-1	TIF 18-8			TIF 18-10	AP 18-7
Self Study (SSS)	SSS 18-2	AP 18-6			TIF 18-11	AP 18-8
	SSS 18-3	TIF 18-10			TIF 18-12	TIF 18-12
	SSS 18-4	TIF 18-11			TIF 18-13	TIF 18-13
<b>Chap 19</b>						
	SS 19-1	AP 19-6	AP 19-1	New	TIF 19-1	TIF 19-1
	SS 19-2	SS 19-1	AP 19-2	AP 19-2	TIF 19-2	TIF 19-2
	SS 19-3	SS 19-2	AP 19-3	AP 19-3	TIF 19-3	TIF 19-3
	SS 19-4	SS 19-3	AP 19-4	AP 19-4	TIF 19-4	TIF 19-4
	SS 19-5	SS 19-4	AP 19-5	New	TIF 19-5A	TIF 19-5A
	SS 19-6	SS 19-5	AP 19-6	New	TIF 19-5B	TIF 19-5B
			AP 19-7	AP 19-7	TIF 19-6	AP 19-1
Supplementary	SSS 19-1	TIF 19-7	AP 19-8	AP 19-8	TIF 19-7	AP 19-5
Self Study (SSS)	SSS 19-2	TIF 19-8	AP 19-9	AP 19-9	TIF 19-8	AP 19-6
			AP 19-10	AP 19-10	TIF 19-9	TIF 19-9
					TIF 19-10	TIF 19-10
<b>Chap 20</b>						
	SS 20-1	SS 20-1	AP 20-1	AP 20-1	TIF 20-1	TIF 20-1
	SS 20-2	SS 20-2	AP 20-2	AP 20-2	TIF 20-2	TIF 20-2
	SS 20-3	SS 20-3	AP 20-3	AP 20-3	TIF 20-3	TIF 20-3
	SS 20-4	SS 20-4	AP 20-4	New	TIF 20-4	TIF 20-4
	SS 20-5	SS 20-5	AP 20-5	New	TIF 20-5A	TIF 20-5A
	SS 20-6	SS 20-6	AP 20-6	New	TIF 20-5B	TIF 20-5B
	SS 20-7	SS 20-7	AP 20-7	AP 20-7	TIF 20-6	TIF 20-6
	SS 20-8	AP 20-10	AP 20-8	New	TIF 20-7	TIF 20-10
	SS 20-9	SS 20-9	AP 20-9	AP 20-9	TIF 20-8	AP 20-4
	SS 20-10	SS 20-10	AP 20-10	New	TIF 20-9	TIF 20-8
	SS 20-11	SS 20-11	AP 20-11	AP 20-11	TIF 20-10	TIF 20-9
	SS 20-12	SS 20-12	AP 20-12	AP 20-12	TIF 20-11	AP 20-6
			AP 20-13	AP 20-13	TIF 20-12	AP 20-8
Supplementary	SSS 20-1	TIF 20-7	AP 20-14	AP 20-14	TIF 20-13	TIF 20-11
Self Study (SSS)	SSS 20-2	AP 20-5	AP 20-15	AP 20-15	TIF 20-14	TIF 20-12
	SSS 20-3	SS 20-8			TIF 20-15	TIF 20-13

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	SS = Self Study		AP = Assignment Prob.		TIF = Test Item File	
	2015/16	2014/15	2015/16	2014/15	2015/16	2014/15
<b>Chap 21</b>						
	SS 21-1	SS 21-1	AP 21-1	AP 21-1	TIF 21-1	TIF 21-1
	SS 21-2	SS 21-2	AP 21-2	AP 21-2	TIF 21-2	TIF 21-2
	SS 21-3	SS 21-3	AP 21-3	<b>New</b>	TIF 21-3	TIF 21-3
	SS 21-4	SS 21-4	AP 21-4	AP 21-4	TIF 21-4	TIF 21-4
	SS 21-5	SS 21-5	AP 21-5	AP 21-5	TIF 21-5A	TIF 21-5A
	SS 21-6	SS 21-6	AP 21-6	AP 21-6	TIF 21-5B	TIF 21-5B
	SS 21-7	SS 21-7	AP 21-7	AP 21-7	TIF 21-6	TIF 21-6
	SS 21-8	SS 21-8	AP 21-8	<b>New</b>	TIF 21-7	AP 21-3
	SS 21-9	SS 21-9	AP 21-9	<b>New</b>	TIF 21-8	TIF 21-8
			AP 21-10	AP 21-10	TIF 21-9	TIF 21-9
			AP 21-11	<b>New</b>	TIF 21-10	TIF 21-10
Supplementary	SSS 20-1	TIF 21-7			TIF 21-11	TIF 21-11
Self Study (SSS)	SSS 20-2	TIF 21-13			TIF 21-12	TIF 21-12
	SSS 20-3	TIF 21-15			TIF 21-13	AP 21-8
	SSS 20-4	TIF 21-17			TIF 21-14	TIF 21-14
					TIF 21-15	AP 21-9
					TIF 21-16	TIF 21-16
					TIF 21-17	AP 21-11

## CHAPTER ONE SOLUTIONS

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### Solution to Assignment Problem One - 1

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**Note To Instructor** If you are assigning this problem, note that only the first two answers can be found in Chapter 1 of the text.

The circumstances under which a general provision of the *Income Tax Act* can be overridden are as follows:

1. In those situations where there is a conflict between the provisions of an international tax treaty and the *Income Tax Act*, the terms of the international tax treaty will prevail.
2. While court decisions cannot be used to change the actual tax law, court decisions may call into question the reasonableness of interpretations of the ITA made by either the CRA or tax practitioners.
3. In some cases, a more specific provision of the *Act* will contain an exception to a general rule. For example, while ITA 18(1)(b) does not allow the deduction of capital expenditures in computing business income, ITA 20(1)(aa) contains a provision that allows the deduction of landscaping costs.

## Solution to Assignment Problem One - 2

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Some of the possible examples of conflicts between objectives would be as follows:

1. **Revenue Generation And International Competitiveness** The need to lower rates of taxation in order to be competitive on an international basis is in conflict with the need to generate revenues.
2. **Fairness And Simplicity** In order to make a tax system simple, a single or small number of tax rates must be applied to a well established concept of income with only a limited number of deductions or exceptions available. This is in conflict with the goal of tailoring the system to be fair to specific types of individuals, such as the disabled.
3. **Revenue Generation And Social Goals** The desire to provide funds to certain types of individuals (Old Age Security) or to provide certain types of services (health care) may be in conflict with the need to generate tax revenues.
4. **Flexibility And Certainty** To make a tax system flexible in changing economic, political, and social circumstances, there must be some uncertainty.

## Solution to Assignment Problem One - 3

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**Note To Instructors** The descriptions of the new tax measures are significantly simplified. The objective of this was to present the basic ideas at a level that could be understood by students at this introductory level, while still providing a basis for discussion.

We would also note that it is obvious that there is no definitive solution to this Assignment Problem. The analysis provided below is intended to be no more than suggestive of possible points that could be made. There are, of course, many alternative solutions.

### **Family Tax Cut**

Possible comments here would be as follows:

**Equity Or Fairness** This provision has been heavily criticized for providing most of its benefits to high income individuals. The tax cost of this provision is estimated to be \$2.4 billion, very little of which will be available to low income families and none to single parent families.

**Simplicity** This is an extremely complex provision that few individuals, other than tax professionals, will fully understand. Evidence of this: The government did not get the initial legislation right and has been forced to issue revisions.

### **Increase In Lifetime Capital Gains Deduction**

Possible comments here would be as follows:

**Neutrality** The increase in the amount of the deduction for farmers and fishermen is not neutral. It favours farmers and fishermen with no benefits for any other group.

**Simplicity** The determination of what properties are considered to be qualified for this deduction involves some very complex legislation.

### **Home Accessibility Tax Cut**

Possible comments here would be as follows:

**Neutrality** This provision is not neutral. Its benefits accrue exclusively to seniors, disabled individuals, and their families. Other individuals do not benefit from this provision.

**Equity Or Fairness** Disabled seniors face accessibility challenges that are not present for most other individuals. Given this, it can be argued that helping this particular group involves fairer treatment of these individuals.

### **Reduction In Small Business Rate**

Possible comments here would be as follows:

**International Competitiveness** It is likely that this tax cut will make Canada a more attractive environment for small business.

**Certainty** By announcing the phase in schedule in advance, certainty of future rates is provided.

### **Increase In Tax Free Savings Account Limits**

Possible comments here would be as follows:

**Equity Or Fairness** It is clear that this change will not benefit low income individuals. If an individual is making \$20,000 per year, it is unlikely that individual will have an extra \$4,500 to tuck away each year. In fact, it is highly unlikely that this individual will have the first \$5,500.

**Simplicity** This change gets high marks for simplicity. Amounts earned on the assets in the account are not subject to tax, either while the assets are in the plan or when the earnings are removed from the plan.

## Solution to Assignment Problem One - 4

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There are a large number of possible responses to a question such as this. Some possibilities would include the following:

- **Simplicity And Ease Of Compliance** A very good feature of this tax is that it is very simple and presents the taxpayer with no compliance problems. Anyone with a head is taxed and no provisions have been made for any modifications in applicability or amounts to be paid.
- **Fairness And Equity** In one sense this is a fair tax in that it applies to every Canadian resident and the amount to be collected from each individual is the same. This could be described as horizontal equity. However, the tax could also be considered unfair in that it gives no consideration to the individual's ability to pay the tax, either in terms of accumulated wealth or income.
- **Regressiveness** Related to fairness is the fact that the tax is regressive. That is, the tax will take a higher percentage of income from low income individuals than it will from high income individuals.
- **Flexibility And Elasticity** Being a very simple tax, it will be very easy to change the rate at which it is assessed. However, as it is a flat tax based simply on the existence of the individual, it will not respond to changing economic conditions.
- **Enforcement And Dependability Of Revenues** Given the presence of a physically visible audit trail (the HAT), there should be no enforcement problems. Further, demographic statistics are reasonably predictable, making it relatively easy for the government to anticipate the expected levels of revenue.
- **Neutrality** Other than decisions related to whether to remain a Canadian resident, the tax appears to be neutral with respect to economic conditions.
- **International Competitiveness** It seems unlikely that a \$200 tax would be sufficient to influence a decision to either leave Canada or move to Canada. Therefore, the tax could be thought of as being internationally competitive.
- **Balance Between Sectors** The tax might be criticized as an additional burden on Canadian individuals as opposed to Canadian businesses.

There are, of course, other factors that could be considered.

## Solution to Assignment Problem One - 5

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The term Net Income For Tax Purposes is commonly used to refer to income as determined under Part I, Division B of the *Income Tax Act*. While Division B does not contain a definition of this income figure, ITA 3 contains a formula for the determination of this amount.

In general terms, Net Income For Tax Purposes would include:

- Net income from employment (Subdivision a).
- Net income from business or property (Subdivision b).
- Taxable capital gains net of allowable capital losses (Subdivision c).
- Other sources of income and other deductions (Subdivisions d and e).

Losses from employment, business, property, and allowable business investment losses can be deducted as long as the total Net Income For Tax Purposes does not go below zero.

In somewhat simplified terms, Taxable Income is simply Net Income For Tax Purposes, less certain deductions that are specified in Division C of the *Income Tax Act*.

As will be explained in subsequent Chapters, these deductions include:

- a portion of stock option income,
- home relocation loan amounts,
- the northern residents deduction,
- the lifetime capital gains deduction, and
- loss carry overs from other years.

## Solution to Assignment Problem One - 6

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### ***Accountant's View***

The accountant's definition uses historical cost accounting following GAAP. Under GAAP, revenue is generally recognized when goods are sold or services delivered. Expenses are then matched against these revenues, with the resulting difference referred to as accounting Net Income.

### ***Economist's View***

The economist's definition of income includes all gains, whether realized or unrealized, as increases in net economic power.

### ***Income Tax Act View***

Conceptually, the ITA view is very similar to the accountant's view. However, there are many differences which result from the application of complex rules in the ITA. For example, a portion of capital gains is not considered to be Taxable Income under the ITA view. In contrast, both accountants and economists would include 100 percent of such gains in income. Note, however, the timing would be different as economists would tend to recognize such gains prior to the realization. Accountants generally do not recognize capital gains until they are realized through a disposition of the relevant asset.

## Solution to Assignment Problem One - 7

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### Case A

The Case A solution would be calculated as follows:

Income Under ITA 3(a):		
Employment Income	\$126,100	
Business Income	<u>14,100</u>	\$140,200
Income Under ITA 3(b):		
Taxable Capital Gains		
[(1/2)(\$56,400)]	\$28,200	
Allowable Capital Losses		
[(1/2)(\$72,300)]	<u>( 36,150)</u>	Nil
Balance From ITA 3(a) And (b)		\$140,200
Spousal Support Payments [(12)(\$600)]		<u>( 7,200)</u>
Balance From ITA 3(c)		\$133,000
Deduction Under ITA 3(d):		
Net Rental Loss		<u>( 4,600)</u>
Net Income For Tax Purposes (Division B Income)		<u>\$128,400</u>

In this Case, Carl has an unused allowable capital loss carry over of \$7,950 (\$28,200 - \$36,150). The lottery winnings would not be included in income.

### Case B

The Case B solution would be calculated as follows:

Income Under ITA 3(a):		
Employment Income	\$89,000	
Interest Income	3,100	
Net Rental Income	<u>8,600</u>	\$100,700
Income Under ITA 3(b):		
Taxable Capital Gains		
[(1/2)(\$46,200)]	\$23,100	
Allowable Capital Losses		
[(1/2)(\$26,300)]	<u>( 13,150)</u>	9,950
Balance From ITA 3(a) And (b)		\$110,650
Deductible RRSP Contribution		<u>( 8,600)</u>
Balance From ITA 3(c)		\$102,050
Deduction Under ITA 3(d):		
Unincorporated Business Loss		<u>( 187,400)</u>
Net Income For Tax Purposes (Division B Income)		<u>Nil</u>

In this Case, Carl has an unused business loss carry over of \$85,350 (\$102,050 - \$187,400).

## Solution to Assignment Problem One - 8

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### Case 1

The Case 1 solution would be calculated as follows:

Income Under ITA 3(a):		
Net Employment Income	\$82,438	
Interest Income	3,521	\$85,959
<hr/>		
Income Under ITA 3(b):		
Taxable Capital Gains	\$16,346	
Allowable Capital Losses	( 3,478)	12,868
<hr/>		
Balance From ITA 3(a) And (b)		\$98,827
RRSP Contribution		( 6,420)
<hr/>		
Balance From ITA 3(c) And Net Income For Tax Purposes		\$92,407
<hr/>		

In this Case, Mr. Bowman has no loss carry overs at the end of the year.

### Case 2

The Case 2 solution would be calculated as follows:

Income Under ITA 3(a):		
Net Business Income		\$56,782
Income Under ITA 3(b):		
Taxable Capital Gains	\$3,426	
Allowable Capital Loss	( 4,560)	Nil
<hr/>		
Balance From ITA 3(a) And (b)		\$56,782
Spousal Support Payments		( 18,000)
<hr/>		
Balance From ITA 3(c)		\$38,782
Deduction Under ITA 3(d):		
Net Rental Loss		( 6,742)
<hr/>		
Net Income For Tax Purposes (Division B Income)		\$32,040
<hr/>		

In this Case, Mr. Bowman has a carry over of \$1,134 (\$4,560 - \$3,426) in unused allowable capital losses.

### Case 3

The Case 3 solution would be calculated as follows:

Income Under ITA 3(a):		
Net Employment Income		\$36,582
Income Under ITA 3(b):		
Taxable Capital Gains [(1/2)(\$8,426)]	\$4,213	
Allowable Capital Losses [(1/2)(\$6,220)]	( 3,110)	1,103
<hr/>		
Balance From ITA 3(a) and (b)		\$37,685
Child Care Costs		( 2,860)
<hr/>		
Balance From ITA 3(c)		\$34,825
Deduction Under ITA 3(d):		
Net Business Loss		( 47,384)
<hr/>		
Net Income For Tax Purposes (Division B Income)		Nil
<hr/>		

In this Case, Mr. Bowman would have a business loss carry over in the amount of \$12,559 (\$47,384 - \$34,825).

**Case 4**

The Case 4 solution would be calculated as follows:

Income Under ITA 3(a):		
Interest Income	\$ 4,850	
Net Business Income	<u>35,682</u>	\$40,532
Income Under ITA 3(b):		
Taxable Capital Gains [(1/2)(\$8,460)]	\$4,230	
Allowable Capital Losses [(1/2)(\$18,462)]	( 9,231)	Nil
<hr/>		
Balance From ITA 3(a) And (b)		\$40,532
Moving Expenses		( 5,643)
<hr/>		
Balance From ITA 3(c)		\$34,889
Deduction Under ITA 3(d):		
Net Rental Loss		( 51,462)
<hr/>		
Net Income For Tax Purposes (Division B Income)		Nil
<hr/>		

Mr. Bowman would have a rental loss carry over in the amount of \$16,573 (\$51,462 - \$34,889) and unused allowable capital losses in the amount of \$5,001 (\$9,231 - \$4,230).

## CHAPTER TWO SOLUTIONS

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### Solution to Assignment Problem Two - 1

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#### ***Need For Instalments***

Instalments are required when an individual's "net tax owing" exceeds \$3,000 in the current year and in either of the two preceding years. In somewhat simplified terms, "net tax owing" is defined as the combined federal and provincial taxes payable, less amounts withheld under ITA 153. Mr. Grafton's net tax owing figures are as follows:

$$\begin{aligned} 2013 &= \$1,700 (\$31,500 - \$29,800) \\ 2014 &= \$8,400 (\$14,600 - \$6,200) \\ 2015 &= \$3,100 (\$27,400 - \$24,300) \text{ Estimated} \end{aligned}$$

As Mr. Grafton's net tax owing in 2015 (the current year) and his net tax owing in 2014 (one of the two preceding years) is greater than \$3,000, he is required to make instalment payments.

#### ***Amounts***

If Mr. Grafton bases the first two quarterly payments on the 2013 net tax owing, they would only be \$425 each ( $\$1,700 \div 4$ ). However, the payments for the last two quarters would be \$3,775 each  $\{[\$8,400 - (2)(\$425)] \div 2\}$ , resulting in total instalment payments of \$8,400.

A preferable alternative would be to base the payments on the net tax owing for 2015. These payments would be \$775 each ( $\$3,100 \div 4$ ), for a total of \$3,100.

#### ***Payment Dates***

The quarterly payments would be due on March 15, June 15, September 15, and December 15.

## Solution to Assignment Problem Two - 2

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### Part A

Under ITA 157(1), Ledux Inc. would have three alternatives with respect to the calculation of its instalment payments. The alternatives and the relevant calculations are as follows:

**Current Year Base** The instalment payments could be 1/12th of the estimated Tax Payable for the current year. In this case the resulting instalments would be \$16,945.42 per month ( $\$203,345 \div 12$ ).

**Preceding Year Base** The instalment payments could be 1/12th of the Tax Payable in the immediately preceding taxation year. The resulting instalments would be \$17,963.92 ( $\$215,567 \div 12$ ).

**Preceding And Second Preceding Years** The third alternative would be to base the first two instalments on 1/12th of the Tax Payable in the second preceding year and the remaining instalments on 1/10th of the Tax Payable in the preceding year, less the total amount paid in the first two instalments.

In this case, the first two instalments would be \$16,118.33 ( $\$193,420 \div 12$ ) each, a total of \$32,236.66. The remaining 10 instalments would be \$18,333.03 [ $(\$215,567 - \$32,236.66) \div 10$ ] each. The total instalments under this approach would be \$215,567.

While the third approach would provide the lowest payments for the first two instalments, the payments would total \$215,567. As this is larger than the \$203,345 total when the instalments are based on the current year's estimated Tax Payable, the use of the current year's Tax Payable approach would be the best alternative.

### Part B

If the Company failed to make instalment payments towards the 2015 taxes payable, it would be liable for interest from the date each instalment should have been paid to the balance due date, March 31, 2015.

Assuming the actual 2015 taxes payable are \$203,345, it would be the least of the amounts described in ITA 157(1), and interest would be calculated based on the current year instalment alternative. The rate charged would be the one prescribed in ITR 4301 for amounts owed to the Minister, the regular base rate plus 4 percentage points.

There is a penalty on large amounts of late or deficient instalments. This penalty is specified in ITA 163.1 and is equal to 50 percent of the amount by which the interest owing on the late or deficient instalments exceeds the greater of \$1,000 and 25 percent of the interest that would be owing if no instalments were made. While detailed calculations are not required, we would note that this penalty would clearly be applicable in this case.

Interest on the entire balance of \$203,345 of taxes payable would be charged beginning on the balance due date, March 31, 2015, two months after the end of the 2015 taxation year. The rate charged would be the one prescribed in ITR 4301 for amounts owed to the Minister, the regular base rate plus 4 percentage points.

There is also a penalty for late filing. If no return is filed by the filing due date of July 31, 2015, the penalty amounts to 5 percent of the tax that was unpaid at the filing date, plus 1 percent per complete month of the unpaid tax for a maximum period of 12 months. This penalty is in addition to any interest charged due to late payment of instalments or balance due. In addition, interest would also be charged on any penalties until such time as the return is filed or the instalments (balance due) paid.

The late file penalty could be doubled to 10 percent, plus 2 percent per month for a maximum of 20 months for a second offence within a three year period.

## Solution to Assignment Problem Two - 3

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### Part A - Case 1

Barry's net tax owing in each of the three years is as follows:

$$\begin{aligned} 2013 &= \$2,456 (\$14,256 - \$11,800) \\ 2014 &= \$1,626 (\$15,776 - \$14,150) \\ 2015 &= \$4,083 (\$16,483 - \$12,400) \text{ Estimated} \end{aligned}$$

While the net tax owing in the current year is expected to exceed \$3,000, it did not exceed \$3,000 in either of the two previous years. The payment of instalments is not required.

### Part A - Case 2

Barry's net tax owing in each of the three years is as follows:

$$\begin{aligned} 2013 &= \text{Nil } (\$14,256 - \$14,920) \text{ Note that a negative number is not used here.} \\ 2014 &= \$4,376 (\$15,776 - \$11,400) \\ 2015 &= \$3,257 (\$16,483 - \$13,226) \text{ Estimated} \end{aligned}$$

As his net tax owing is expected to exceed \$3,000 in 2015 and was more than \$3,000 in 2014, the payment of instalments is required.

Instalments under the three acceptable alternatives would be as follows:

**Alternative 1** Using the estimated net tax owing for the current year would result in quarterly instalments of \$814.25 ( $\$3,257 \div 4$ ), for a total amount of \$3,257.

**Alternative 2** Using the net tax owing for the previous year would result in quarterly instalments of \$1,094 ( $\$4,376 \div 4$ ), for a total amount of \$4,376.

**Alternative 3** Using the net tax owing for the second previous year would result in the first two instalments being nil. The remaining two instalments would be \$2,188 ( $\$4,376 \div 2$ ), a total of \$4,376.

The best choice would be Alternative 1. While the first two instalments are lower under Alternative 3, the total for the year under Alternative 3 is \$1,119 ( $\$4,376 - \$3,257$ ) higher.

### Part A - Case 3

Barry's net tax owing in each of the three years is as follows:

$$\begin{aligned} 2013 &= \$3,036 (\$14,256 - \$11,220) \\ 2014 &= \$2,501 (\$15,776 - \$13,275) \\ 2015 &= \$3,610 (\$16,483 - \$12,873) \text{ Estimated} \end{aligned}$$

As his net tax owing is expected to exceed \$3,000 in 2015 and was more than \$3,000 in 2013, the payment of instalments is required.

Instalments under the three acceptable alternatives would be as follows:

**Alternative 1** Using the estimated net tax owing for the current year would result in quarterly instalments of \$902.50 ( $\$3,610 \div 4$ ), for a total amount of \$3,610.

**Alternative 2** Using the net tax owing for the previous year would result in quarterly instalments of \$625.25 ( $\$2,501 \div 4$ ), for a total amount of \$2,501.

**Alternative 3** Using the net tax owing for the second previous year would result in the first two instalments being \$759 ( $\$3,036 \div 4$ ) each, a total of \$1,518. The remaining two instalments would be \$491.5 [ $(\$2,501 - \$1,518) \div 2$ ], a total of \$983. When combined with the first two instalments, the total for the year would be \$2,501 ( $\$1,518 + \$983$ ).

The best choice would be Alternative 2. While the total for the year under Alternative 3 is the same, the first two instalments are lower under Alternative 2, allowing for a small amount of tax deferral.

### **Part B**

In Case Two and Case Three, the required instalments would be due on March 15, June 15, September 15, and December 15, 2015.

## Solution to Assignment Problem Two - 4

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### Case One

1. As the corporation's tax payable for both the current and the preceding year exceeds \$3,000, instalments are required. As the corporation is not a small CCPC, monthly instalments are required.
2. The three acceptable alternatives would be as follows:
  - Monthly instalments of \$9,435 ( $\$113,220 \div 12$ ) based on the current year estimate.
  - Monthly instalments of \$10,185 ( $\$122,220 \div 12$ ) based on the first preceding year.
  - Two monthly instalments of \$8,640 ( $\$103,680 \div 12$ ) based on the second preceding year, followed by 10 monthly instalments of \$10,494  $\{[(\$122,220 - (2)(\$8,640)) \div 10]\}$ , a total of \$122,220.
3. The best alternative in terms of minimum instalments would be 12 instalments of \$9,435, resulting in a total of \$113,220 of instalment payments.

The instalments would be due on the last day of each month, beginning in January, 2015.

### Case Two

1. As the corporation's tax payable for both the current and the preceding year exceeds \$3,000, instalments are required. As the corporation is not a small CCPC, monthly instalments are required.
2. The three acceptable alternatives would be as follows:
  - Monthly instalments of \$9,435 ( $\$113,220 \div 12$ ) based on the current year estimate.
  - Monthly instalments of \$9,210 ( $\$110,520 \div 12$ ) based on the first preceding year.
  - Two monthly instalments of \$8,640 ( $\$103,680 \div 12$ ) based on the second preceding year, followed by 10 monthly instalments of \$9,324  $\{[(\$110,520 - (2)(\$8,640)) \div 10]\}$ , a total of \$110,520.
3. The best alternative would be two payments of \$8,640, followed by ten payments of \$9,324. While the total instalments are the same \$110,520 in both the second and third alternatives, the third alternative is preferable because the first two payments are lower. This provides a small amount of tax deferral.

The instalments would be due on the last day of each month, beginning in January, 2015.

### Case Three

1. As the corporation's tax payable for both the current and the preceding year exceeds \$3,000, instalments are required. As the corporation is a small CCPC, instalments will be quarterly.
2. The three acceptable alternatives would be as follows:
  - Quarterly instalments of \$28,305 ( $\$113,220 \div 4$ ) based on the current year estimate.
  - Quarterly instalments of \$30,555 ( $\$122,220 \div 4$ ) based on the first preceding year.
  - One instalment of \$25,920 ( $\$103,680 \div 4$ ) based on the second preceding year, followed by three instalments of \$32,100  $[(\$122,220 - \$25,920) \div 3]$ , a total of \$122,220.
3. The best alternative in terms of minimum instalments would be four instalments of \$28,305, for total payments of \$113,220. The instalments are due on March 31, June 30, September 30, and December 31, 2015.

**Case Four**

1. As the corporation's tax payable for both the current and the preceding year exceeds \$3,000, instalments are required. As the corporation is a small CCPC, instalments will be quarterly.
2. The three acceptable alternatives would be as follows:
  - Quarterly instalments of \$28,305 ( $\$113,220 \div 4$ ) based on the current year estimate.
  - Quarterly instalments of \$27,630 ( $\$110,520 \div 4$ ) based on the first preceding year.
  - One instalment of \$25,920 ( $\$103,680 \div 4$ ) based on the second preceding year, followed by three instalments of \$28,200 [ $(\$110,520 - \$25,920) \div 3$ ], a total of \$110,520.
3. The best alternative would be one payment of \$25,920, followed by three payments of \$28,200. While the total instalments are the same \$110,520 in both the second and third alternatives, the third alternative is preferable because the first payment is lower. This provides a small amount of tax deferral.

The instalments are due on March 31, June 30, September 30, and December 31, 2015.

## Solution to Assignment Problem Two - 5

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### **Part A**

For individuals, the taxation year is always the calendar year. Individuals without business income are required to file their tax returns no later than April 30 of the year following the relevant taxation year. For individuals with business income, and their spouse or common-law partner, the filing deadline is extended to June 15.

### **Part B**

The general rules are the same for both deceased and living individuals. That is, the return must be filed no later than April 30 of the year following the year of death. If the deceased individual, or his spouse or common-law partner had business income, the due date is June 15 of the year following the year of death.

However, when death occurs between November 1 of a taxation year and the normal filing date for that year's return, representatives of the deceased can file the return on the later of the normal filing due date (April 30th or June 15th of the following year) and six months after the date of death.

### **Part C**

Testamentary trusts are currently permitted to use a non-calendar fiscal year as their taxation year. In contrast, inter vivos trusts must use the calendar year as their taxation year. Without regard to the type of trust, its tax return must be filed within 90 days of the end of the taxation year. Note that in taxation years subsequent to 2015, testamentary trusts will be required to use the calendar year as the taxation year. They will no longer be permitted to have a non-calendar taxation year.

### **Part D**

Corporations can use a non-calendar fiscal year as their taxation year. The corporate T2 return must be filed within six months of the end of the taxation year.

## Solution to Assignment Problem Two - 6

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The following additional information would be relevant in considering Mr. Simon's situation:

- A. Determination of the date of the Notice of Reassessment. A notice of objection must be filed prior to the later of:
- 90 days from the date of the Notice of Reassessment; and
  - one year from the due date for the return under reassessment.

In this case, the later date is clearly 90 days after the date of the Notice of Reassessment.

- B. Determination of the date of the Notice of Assessment for the 2011 taxation year. A three year time limit applies from the date of the Notice of Assessment. As the Notice of Assessment for 2011 would normally have been mailed after April, 2012, this reassessment is likely within the three year limit.

- C. Determination of whether Mr. Simon has signed a waiver of the three year time limit or if he is guilty of fraud or misrepresentation. If the reassessment is not within the three year time limit, Mr. Simon would not usually be subject to reassessment. However, if Mr. Simon has signed a waiver of the three year time limit, or if fraud or misrepresentation is involved, he becomes subject to reassessment, regardless of the time period involved.

If the preceding determinations indicate that the reassessment is valid and you decide to accept Mr. Simon as a client, the following steps should be taken:

- You should have Mr. Simon file a Consent Form, T1013, with the CRA which authorizes you to represent him in his affairs with the CRA and/or authorize you to access his file through the online Represent a Client service.
- A notice of objection should be filed before the expiration of the 90 day time limit.
- You should begin discussions of the matter with the relevant assessor at the CRA.

## Solution to Assignment Problem Two - 7

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**Note To Instructor** These Cases have been based on examples found in IC 01-1.

### **Case A**

In view of the business that the taxpayer is in, there was nothing in the income statement that would have made the accountant question the validity of the information provided to him. Therefore, he could rely on the good faith reliance exception and would not be subject to the preparer penalty.

### **Case B**

The prospectus prepared by the company contains a false statement (overstated fair market value of the software) that could be used for tax purposes. The company knew or would reasonably be expected to know, but for culpable conduct, that the fair market value of the software was a false statement. Since the company is engaged in an excluded activity, it cannot rely on the good faith reliance exception with respect to the valuation. The CRA would consider assessing the company with third-party civil penalties in the amount of \$2,000,000 (i.e., the gross entitlements). The CRA would also consider assessing the appraiser with third-party civil penalties. The amount of the penalty would be his gross entitlements from the valuation activity, which is \$75,000.

### **Case C**

Although the tax return contains one or more false statements, the tax return preparer would be entitled to the good faith defense since he relied, in good faith, on information (the financial statements that were not obviously unreasonable) provided by another professional on behalf of the client. Therefore, he would not be subject to the preparer penalty.

The third-party penalties may be applied to the other accountant if he knew or would be expected to know, but for circumstances amounting to culpable conduct, that the financial statements contained false statements.

### **Case D**

The accountant would not be subject to the penalties for participating or acquiescing in the understatement of a tax liability. The facts were highly suspect until the accountant asked questions to clear up the doubt in his mind that the client was not presenting him with implausible information. The response addressed the concern and was not inconsistent with the knowledge he possessed.

### **Case E**

Since the tax return preparer e-filed the taxpayer's return without obtaining the charitable donation receipt, the CRA would consider assessing the tax return preparer with the preparer penalty. Given that the size of the donation is so disproportionate to the taxpayer's apparent resources as to defy credibility, to proceed unquestioningly in this situation would show wilful blindness and thus an indifference as to whether the ITA is complied with.

### **Case F**

The issue here is whether the accountant is expected to know that GST is not payable on wages, interest expense, and zero-rated purchases. It is clear that the accountant should have known that no GST could be claimed on these items. Given this, in filing a claim that includes a GST refund on the preceding items, the accountant made a false statement, either knowingly, or in circumstances amounting to culpable conduct. Consequently, the CRA would consider assessing the accountant with the third-party civil penalty, specifically, the preparer penalty.

## CHAPTER THREE SOLUTIONS

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### Solution to Assignment Problem Three - 1

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**Case A**

The company will deduct the bonus in the year ending August 31, 2015. Christine will include it in income in the calendar year ending December 31, 2015.

**Case B**

In this case, the bonus is paid within 180 days of the company's July 31, 2015 year end. Given this, the company will be able to deduct the bonus in that year. However, Christine will not have to include it in income until the calendar year ending December 31, 2016.

**Case C**

In this case, the bonus is not paid within 180 days of the company's December 31, 2015 year end. This means that the company will not be able to deduct the bonus until the taxation year ending December 31, 2016. Christine will include the bonus in income in the calendar year ending December 31, 2016.

**Case D**

As the bonus is not paid within three years of the end of the year in which the services were rendered, this is a salary deferral arrangement. The company will deduct the bonus in the fiscal year ending September 30, 2016. However, as it was earned in 2015, Christine will have to include the bonus in the calendar year ending December 31, 2015.

## Solution to Assignment Problem Three - 2

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### **Background**

The facts in this case reflect a Tax Court Of Canada case that was decided in June, 2010 (Vipan Bansal vs. Minister Of National Revenue).

At issue was whether the appellant worked as an employee or as an independent contractor during the period from January 1, 2008 to October 21, 2008 for the purposes of the Canada Pension Plan and the Employment Insurance Act. The appellant argued that he was an employee of the payor whereas the Minister determined that he was not.

We have changed the name of the appellant and updated the dates in order to avoid having students locate the actual case if this is used as an assignment problem.

### **Intent**

The most important factor in the employer/independent contractor decision is the intent of both parties. The court noted that, as there was a disagreement between the parties as to intent, it becomes necessary to look at all of the facts to determine the legal relationship that they reflect.

### **Factors Suggesting Independent Contractor Status**

**Tools** The Appellant provided his own car.

#### **Risk Of Loss**

- The Appellant had liability exposing him to a risk of loss.
- The Appellant incurred vehicle expenses, including insurance, maintenance and fuel.
- The Appellant incurred operating expenses such as liability insurance and a driver training endorsement.
- The Appellant paid for the installation and removal of the emergency brake provided by the Payor.

**Chance Of Profit** The more hours (over 20) the Appellant worked the greater were his chances of profit. Although not stated in the problem, this was not the case for the driving instructors having employee status since they were limited in the number of hours they could work.

#### **Control**

- The Appellant did not have a set schedule of hours or days of work.
- The Appellant could choose the routes for the lessons.
- The Appellant could work for anyone else (except as a driving instructor).

**Behaviour As An Entrepreneur** He behaved like an independent contractor in that he invoiced the Payor, charged the Payor GST, maintained his own books and records, and reported business income and business expenses on his 2013, 2014 and 2015 income tax returns.

### **Factors Suggesting Employee Status**

**Tools** The Payor provided vehicle signage, mirrors, traffic cones and an emergency brake.

#### **Control**

- The Payor provided the Appellant with a guide and the Appellant had to comply with all the instructions therein regarding the method of teaching.
- Although the Appellant could hire an assistant, he could not have someone replace him.

The conclusion of the Tax Court Of Canada was as follows:

Here we have an Appellant who, if I accept his testimony, was an employee (even though he behaved for a number of years like an independent contractor), and yet he performed his services in his own vehicle, paid for the installation and removal of the

emergency brake provided by the Payor, incurred operating expenses, including vehicle expenses (insurance, maintenance and fuel), paid for liability insurance and a driver training endorsement, effectively had exposure to all kinds of liability, did not have a set schedule of hours or days of work and could, in a way, set his own deadlines and priorities.

I cannot find in these circumstances that the existence of some degree of control by the Payor over the Appellant outweighs the overall view that the Appellant was in business on his own account (e.g., an independent contractor).

## Solution to Assignment Problem Three - 3

### Part A - Jerry Chooses The Lexus ES

If Jerry chooses the Lexus ES and selects Option 1, the taxable benefit will be calculated as follows:

Standby Charge [(2%)(12)(\$45,000)]	\$10,800
Operating Cost Benefit (Jerry Pays His Own Costs)	Nil
Total Taxable Benefit	\$10,800
Number Of Years	2
Total Taxable Benefit - Option 1	\$21,600

Given this, the after tax cash flow associated with Option 1 would be calculated as follows:

Signing Bonus		\$55,000
Tax Consequences:		
Signing Bonus	(\$55,000)	
Taxable Benefit	( 21,600)	
Increase In Taxable Income	(\$76,600)	
Jerry' Marginal Tax Rate	48%	( 36,768)
Net Cash Inflow (Outflow)		\$18,232

Alternatively, the after tax cash flow associated with Option 2 would be as follows:

Signing Bonus		\$100,000
Purchase Price Of Vehicle		( 45,000)
Tax Consequences:		
Signing Bonus	(\$100,000)	
Jerry' Marginal Tax Rate	48%	( 48,000)
Trade In Proceeds		20,000
Net Cash Inflow (Outflow)		\$27,000

With respect to the Lexus ES alternative, selecting Option 2, is the better alternative. Note that, as Jerry pays his own operating expenses in both Option 1 and Option 2, this factor can be ignored in our calculations.

### Part B - Jerry Chooses the Lexus LS

If Jerry chooses the Lexus LS and selects Option 1, the taxable benefit will be calculated as follows:

Standby Charge [(2%)(12)(\$100,000)]	\$24,000
Operating Cost Benefit (Jerry Pays His Own Costs)	Nil
Total Taxable Benefit	\$24,000
Number Of Years	2
Total Taxable Benefit - Option 1	\$48,000

Given this, the after tax cash flow associated with Option 1 would be calculated as follows:

Signing Bonus		Nil
Tax Consequences:		
Taxable Benefit	(\$48,000)	
Signing Bonus	Nil	
Increase In Taxable Income	( 48,000)	
Jerry' Marginal Tax Rate	48%	(23,040)
Net Cash Inflow (Outflow)		(\$23,040)

Alternatively, the after tax cash flow associated with Option 2 would be as follows:

Signing Bonus		\$100,000
Purchase Price Of Vehicle		( 100,000)
Tax Consequences:		
Signing Bonus	(\$100,000)	
Jerry' Marginal Tax Rate	<u>48%</u>	( 48,000)
Trade In Proceeds		<u>40,000</u>
Net Cash Inflow (Outflow)		<u>\$ 8,000</u>

Once again, operating costs are ignored in that Jerry pays his own operating costs in both Option 1 and Option 2. As was the case with the Lexus ES, Option 2 is the preferred alternative. The economic basis for this result is the fact that in Option 2, Jerry benefits from the trade in value of the car, while in Option 1, this benefit goes to the Company.

Although the requirements of the problem ask that only the cash flows be considered, we would note that the alternative of purchasing the car carries more uncertainty. Both the resale value and the actual operating costs are estimates. If there was a large variation from the estimate for either or both of these amounts, it could substantially affect the total cash outflow of the purchase alternative.

## Solution to Assignment Problem Three - 4

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### Case A

In this Case, the taxable benefit would be calculated as follows:

Standby Charge [(2%)(\\$42,000)(11)(4,000/18,337*)]	\$2,016
Operating Cost Benefit - Lesser Of:	
• [(4,000)(\\$0.27)] = \$1,080	
• [(1/2)(\\$2,016)] = \$1,008	1,008
Total Benefit	\$3,024

\*[(11)(1,667)]

As Ms. Smith's usage is more than 50 percent employment related, she can use the reduced standby charge calculation. In addition, she can use one-half the standby charge as her operating cost benefit.

### Case B

In this Case, the taxable benefit would be calculated as follows:

Standby Charge [(2%)(\\$42,000)(10)(16,670*/16,670*)]	\$ 8,400
Operating Cost Benefit - Lesser Of:	
• [(23,000)(\\$0.27)] = \$6,210	
• [(1/2)(\\$8,400)] = \$4,200	4,200
Total Benefit	\$12,600

\*[(10)(1,667)]

As Ms. Smith's usage is more than 50 percent employment related, she can use the reduced standby charge calculation. In addition, she can use one-half the standby charge as her operating cost benefit.

### Case C

In this Case, the taxable benefit would be calculated as follows:

Standby Charge [(2%)(\\$42,000)(8)]	\$ 6,720
Operating Cost Benefit [(44,000)(\\$0.27)]	11,880
Total Benefit	\$18,600

As Ms. Smith's employment usage was less than 50 percent, there is no reduction in the basic standby charge. This also means that Ms. Smith cannot elect to use the alternative calculation of the operating costs benefit as one-half of the standby charge.

## Solution to Assignment Problem Three - 5

**Ms. Marianne Dorsey** The taxable benefit to be allocated to the president of the Company would be calculated as follows:

Standby Charge [(2%)(11)(\$185,000)]	\$40,700
Operating Cost Benefit [(53,000 - 18,000)(\$0.27)]	9,450
<b>Total Benefit</b>	<b>\$50,150</b>

As less than 50 percent of Marianne's kilometers were employment related, she cannot reduce the standby charge or use the alternative calculation of the operating cost benefit, based on one-half of the standby charge, even if it was more advantageous.

**Mr. John Dorsey** The taxable benefit to be allocated to the vice president of finance would be calculated as follows:

Standby Charge [(2%)(71,500)(10)(16,667/16,667*)]	\$14,300
Operating Cost Benefit - Lesser Of:	
• [(22,000)(\$0.27)] = \$5,940	
• [(1/2)(\$14,300)] = \$7,150	5,940
<b>Total Benefit</b>	<b>\$20,240</b>

\*The numerator cannot exceed the denominator which is equal to [(10)(1,667)]

While John is eligible for the reduced standby charge calculation, his personal use is more than 1,667 kilometers per month of availability. This means that the reduction formula leaves the standby charge unchanged. While he eligible for the alternative calculation of the operating cost benefit, it would produce a larger taxable benefit in this situation.

**Ms. Misty Martin** The taxable benefit to be allocated to the vice president of design would be calculated as follows:

Standby Charge [(2/3)(12)(\$620 - \$100)]	\$ 4,160
Operating Cost Benefit [(51,000 - 14,000)(\$0.27)]	9,990
Reimbursement [(12)(\$200)]	( 2,400)
<b>Total Benefit</b>	<b>\$11,750</b>

As less than 50 percent of the kilometers are employment related, there is no reduction in the standby charge. In addition, the alternative calculation of the operating cost benefit cannot be used.

**Mr. Saul Dorsey** The taxable benefit that would be allocated to the marketing vice president would be calculated as follows:

Standby Charge [(2/3)(8)(\$1,200)(1,700/13,336*)]	\$816
Operating Cost Benefit - Lesser Of:	
• [(1,700)(\$0.27)] = \$459	
• [(1/2)(\$816)] = \$408	408
<b>Total Benefit</b>	<b>\$1,224</b>

\*[(8)(1,667)]

As more than 50 percent of the use was employment related, there is a reduction in the standby charge. As the car was driven more than 50 percent for employment related purposes, Saul can calculate the operating cost benefit as one-half of the standby charge which results in a lower benefit.

## Solution to Assignment Problem Three - 6

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### Part A

Mr. Lee would be assessed a taxable benefit on the loan of \$10,000 [(2%)(\\$500,000)] for the current year. However, under ITA 80.5, this would be deemed interest paid. As he is using the funds provided to produce income, the full amount would be deductible, resulting in no net change in his taxes.

The cost of the loan to the company for the first year would be calculated as follows:

Lost Earnings On Funds Loaned [(9%)(\\$500,000)]	\$45,000
Corporate Taxes On Imputed Earnings (At 27 Percent)	( 12,150)
Net Cost To Company - Loan	\$32,850

This will result in Mr. Lee having the use of \$500,000 at no tax cost to himself and an annual cost of \$32,850 to the Company.

### Part B

If instead of giving Mr. Lee the \$500,000, the Company pays him the potentially lost annual earnings of \$45,000, the after tax cost to the Company will be the same, as shown in the following calculation:

Additional Salary	\$45,000
Savings In Corporate Taxes (At 27 Percent)	( 12,150)
Net Cost To Company - Additional Salary	\$32,850

### Part C

Mr. Lee can borrow on a loan at a rate of interest of 6 percent. This means that the annual interest payments on \$500,000 would amount to \$30,000 and would be deductible.

If he receives the additional salary, his after tax income would be as follows:

Additional Salary	\$45,000
Deductible Interest On Investment Loan	( 30,000)
Increase In Net Income For Tax Purposes	\$15,000
Tax Payable (At 46 Percent)	( 6,900)
Net Increase In Cash	\$ 8,100

Mr. Lee should accept the additional salary of \$45,000 per year as it results in an annual cash increase of \$8,100.

## Solution to Assignment Problem Three - 7

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### **Alternative 1 - Provide Additional Salary**

In the absence of the interest free loan, Ms. Monson would borrow \$300,000 at 4.5 percent, requiring an annual interest payment of \$13,500. In determining the amount of salary needed to carry this loan, consideration has to be given to the fact that additional salary will be taxed at 46 percent.

As the interest is not deductible, additional salary of \$25,000 [ $\$13,500 \div (1 - 0.46)$ ] is needed.

Using this figure, the employer's after tax cash flow required to provide sufficient additional salary for the Ms. Monson to carry a conventional \$300,000 mortgage would be calculated as follows:

Required Salary [ $\$13,500 \div (1 - 0.46)$ ]	\$25,000
Tax Savings From Deducting Salary [ $(\$25,000)(36\%)$ ]	( 9,000)
<u>Employer's After Tax Cash Flow - Additional Salary</u>	<u>\$16,000</u>

### **Alternative 2 - Provide The Loan**

If the loan is provided, Ms. Monson will have a taxable benefit of \$6,000 [(2% - Nil)( $\$300,000$ )], resulting in additional taxes payable of \$2,760 [(46%)( $\$6,000$ )]. To make this situation comparable to the straight salary alternative, Elmwood Inc. will have to provide Ms. Monson with both the loan amount and sufficient additional salary to pay the \$2,760 in taxes on the benefit that will be assessed.

The required amount would be \$5,111 [ $\$2,760 \div (1 - 0.46)$ ].

Elmwood Inc.'s cash flow associated with the after tax cost of providing the additional salary as well as the after tax lost earnings on the \$300,000 loan amount would be calculated as follows:

Required Salary [ $\$2,760 \div (1 - 0.46)$ ]	\$ 5,111
Tax Savings From Deducting Salary [ $(\$5,111)(36\%)$ ]	( 1,840)
After Tax Cost Of Salary To Cover Taxes On Benefit	\$ 3,271
Employer's Lost Earnings [(7%)( $1 - 0.36$ )( $\$300,000$ )]	13,440
<u>Employer's After Tax Cash Flow - Loan</u>	<u>\$16,711</u>

### **Conclusion**

Given these results, on the basis of cash flows only, payment of additional salary appears to be the better alternative. However, the difference between the alternatives is relatively small. As Ms. Monson is a highly valued employee, there could be non-financial advantages to providing the loan such as employee loyalty and the retention of her services especially if the loan is for a longer period of time.

## Solution to Assignment Problem Three - 8

### Part A

There would be no tax effects resulting from the granting of the options in 2013.

Since the option price was below the fair market value at the time the shares were issued, there is no deduction available under ITA 110(1)(d) in the calculation of Taxable Income. As Patricia's employer is a public company, the exercise of the options in 2014 will result in the following addition to Net Income For Tax Purposes and Taxable Income:

Fair Market Value At Exercise [(1,500)(\$50)]	\$75,000
Option Price [(1,500)(\$45)]	( 67,500)
<u>Employment Income</u>	<u>\$ 7,500</u>

In 2015, when the shares are sold, there is the following addition to Net Income For Tax Purposes and Taxable Income:

Proceeds Of Disposition [(1,500)(\$55)]	\$82,500
Adjusted Cost Base [(1,500)(\$50)]	(\$75,000)
Commission [(\$82,500)(1%)]	( 825)
<u>Capital Gain</u>	<u>\$ 6,675</u>
<u>Inclusion Rate</u>	<u>1/2</u>
<u>Taxable Capital Gain</u>	<u>\$ 3,338</u>

### Part B

There would be no tax effects resulting from the granting of the options in 2013.

If the 2013 trading value for the shares had been \$44, the option price would have been above fair market value and the ITA 110(1)(d) deduction would be available. On this basis, the 2014 results would be as follows:

Fair Market Value At Exercise [(1,500)(\$50)]	\$75,000
Option Price [(1,500)(\$45)]	( 67,500)
<u>Employment Income = Increase In Net Income For Tax Purposes</u>	<u>\$ 7,500</u>
<u>ITA 110(1)(d) Deduction [(1/2)(\$7,500)]</u>	<u>( 3,750)</u>
<u>Increase In Taxable Income</u>	<u>\$ 3,750</u>

The results for 2015 would be unchanged from Part A.

### Part C

If Patricia's employer had been a Canadian controlled private company, there would be no tax effects in either 2013 or 2014.

There is no deduction available under either ITA 110(1)(d) or ITA 110(1)(d.1) when the shares are sold. The option price was below the fair market value when the options were issued. Further, Patricia did not hold the shares for the two years required for the ITA 110(1)(d.1) deduction. When the shares are sold in 2015, there is the following addition to Net Income For Tax Purposes and Taxable Income:

Fair Market Value At Exercise [(1,500)(\$50)]	\$75,000
Option Price [(1,500)(\$45)]	( 67,500)
<u>Taxable Capital Gain {[1/2][1,500)(\$55 - \$50) - \$825]}</u>	<u>3,338</u>
<u>Increase In Net Income For Tax Purposes</u>	
<u>And Taxable Income</u>	<u>\$10,838</u>

## Solution to Assignment Problem Three - 9

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### Case A

The required information under the assumption that Opting Inc. is a Canadian controlled private corporation is as follows:

- Year of granting and exercise - No tax effect.
- Year of sale - As the option price was less than the fair market value of the shares at the time the options were granted, no deduction is available under ITA 110(1)(d). However, Sandra held the shares for more than two years after their acquisition and, as a consequence, she can claim a deduction against employment income under ITA 110(1)(d.1). The tax effects would be as follows:

Fair Market Value Of Acquired Shares [(\$17.50)(275)]	\$4,812.50
Cost Of Acquired Shares [(\$15.00)(275)]	( 4,125.00)
Employment Income	\$ 687.50
Taxable Capital Gain [(275)(\$20.25 - \$17.50)(1/2)]	378.13
Increase In Net Income For Tax Purposes	\$1,065.63
Deduction Under ITA 110(1)(d)	Nil
Deduction Under ITA 110(1)(d.1) [(1/2)(\$687.50)]	( 343.75)
Increase In Taxable Income	\$ 721.88

### Case B

The required information under the assumption that Opting Inc. is a Canadian public company is as follows:

- Year of granting - No tax effect.
- Year of exercise - As the option price was less than the fair market value of the shares at the time the options were issued, the ITA 110(1)(d) deduction from Taxable Income is not available. As Opting is a public company, no deduction is available under ITA 110(1)(d.1). The tax effects would be as follows:

Fair Market Value Of Acquired Shares [(\$17.50)(275)]	\$4,812.50
Cost Of Acquired Shares [(\$15.00)(275)]	( 4,125.00)
Employment Income And Increase In Net Income For Tax Purposes	\$ 687.50
Deduction Under ITA 110(1)(d)	Nil
Increase In Net Income And Taxable Income	\$ 687.50

- Year of sale - The tax effects would be as follows:

Allowable Capital Loss [(275)(\$16.00 - \$17.50)(1/2)]	(\$ 206.25)
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Both Net Income For Tax Purposes and Taxable Income would be nil.

**Note to Instructor:** Depending on what has been covered in your course, students may or may not be expected to comment on the ability to carry the capital loss back or forward as follows:

If she has taxable capital gains in the previous 3 years or any year in the future, the loss could be carried back or carried forward and deducted in the determination of Taxable Income.

**Case C**

The required information under the assumption that Opting Inc. is a Canadian public company is as follows:

- Year of granting - No tax effect.
- Year of exercise - The results for this year would be as follows:

Fair Market Value Of Acquired Shares [(\$17.50)(275)]	\$4,812.50
Cost Of Acquired Shares [(\$15.00)(275)]	( 4,125.00)
<hr/>	
Employment Income And	
Increase In Net Income For Tax Purposes	\$ 687.50
Deduction Under ITA 110(1)(d) [(1/2)(\$687.50)]	( 343.75)
<hr/>	
Increase In Taxable Income	\$ 343.75
<hr/>	

As the option price was greater than the fair market value of the shares at the time the options were issued, the ITA 110(1)(d) deduction can be taken.

- Year of sale - The tax effects would be as follows:

Taxable Capital Gain [(275)(\$19.75 - \$17.50)(1/2)]	\$309.38
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This would be both the increase in Net Income For Tax Purposes and the increase in Taxable Income for the year.

**Case D**

The required information under the assumption that Opting Inc. is a Canadian controlled private corporation is as follows:

- Year of granting - No tax effect.
- Year of exercise - No tax effect.
- Year of sale - The tax effects would be as follows:

Fair Market Value Of Acquired Shares [(\$17.50)(275)]	\$4,812.50
Cost Of Acquired Shares [(\$15.00)(275)]	( 4,125.00)
<hr/>	
Employment Income	\$ 687.50
Taxable Capital Gain [(275)(\$21.50 - \$17.50)(1/2)]	550.00
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Increase In Net Income For Tax Purposes	\$1,237.50
Deduction Under ITA 110(1)(d) [(1/2)(\$687.50)]	( 343.75)
<hr/>	
Increase In Taxable Income	\$ 893.75
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As the option price was greater than the fair market value of the shares at the time the options were issued, the ITA 110(1)(d) deduction can be taken.

## Solution to Assignment Problem Three - 10

Ms. Shirley Kantor's net employment income for the year would be calculated as follows:

Salary	\$142,000
Federal And Provincial Income Tax	Nil
RPP Contributions	( 3,200)
EI Premiums	Nil
CPP Contributions	Nil
United Way Donations	Nil
Professional Dues	( 1,250)
Bonus - Item 2	25,000
Car Benefit - Item 3	5,694
Salary Advance - Item 4	50,000
Allowance For Acquiring Business Clothing - Item 6	4,800
Squash Club Membership - Item 6	2,800
Financial Advisor Fees - Item 6	1,200
Stock Option Benefit - Item 7	4,000
Computer Related Supplies - Item 8	( 150)
<b>Net Employment Income</b>	<b>\$230,894</b>

**Item 1** The reimbursement of moving expenses is not a taxable benefit. However, as the costs were reimbursed, Shirley cannot deduct them.

**Item 2** As employment income is determined on a cash basis, only the portion of the bonus that was received during 2015 will be included in income.

**Item 3** The taxable benefit on the car would be calculated as follows:

Standby Charge $[(2\%)(\$39,550)(12)(8,000 \div 20,004^*)]$	\$3,796
Operating Cost Benefit - Lesser Of:	
$[(\$0.27)(8,000)] = \$2,160$	
$[(1/2)(\$3,796)] = \$1,898$	1,898
<b>Total Benefit</b>	<b>\$5,694</b>

\* $[(12)(1,667)]$

**Item 4** Even though the \$50,000 is earned in 2016, it is paid in 2015 and, because employment income is on a cash basis, it must be included in income in that year.

**Item 5** The use of Aeroplan points earned on employment related travel does not create a taxable benefit.

**Item 6** While employer provided specialized clothing is not a taxable benefit, regular business clothing would not fit this description, resulting in the inclusion of this allowance in income. As the squash club membership is not used at all for employment related activity, it would be considered a taxable benefit (according to IT-470R). While mental or physical health counseling is not considered a taxable benefit, this is not the case with financial counseling.

**Item 7** While there is no employment income inclusion resulting from the exercise of the CCPC stock options, there is an inclusion of \$4,000  $[(500)(\$28 - \$20)]$  when the shares are sold. This inclusion would be accompanied by a deduction of \$2,000  $[(1/2)(\$4,000)]$  in the calculation of Taxable Income. However, the deduction does not affect the calculation of net employment income.

**Item 8** While Shirley cannot deduct CCA (tax depreciation) on the computer, she can deduct the cost of the supplies.

## Solution to Assignment Problem Three - 11

For an employee who earns commissions, motor vehicle costs (other than CCA and financing costs) and other travel costs can be deducted under either ITA 8(1)(f) or, alternatively a combination of ITA 8(1)(h) and 8(1)(h.1). A potential problem arises in that:

- The total deducted under ITA 8(1)(f) is limited to commission income.
- A commission salesperson cannot use ITA 8(1)(f) for some costs (e.g., entertainment and advertising costs) and use ITA 8(1)(h) and 8(1)(h.1) for his travel costs. If he uses ITA 8(1)(f), he cannot use ITA 8(1)(h) and 8(1)(h.1).

This means that if he is deducting items like entertainment and advertising, which can only be deducted under ITA 8(1)(f), he will have to deduct travel costs under that provision as well. This procedure may result in exceeding the commission income limit.

In order to deal with this problem, separate calculations must be made for ITA 8(1)(f) including motor vehicle and travel costs, and for the total of motor vehicle and travel costs under ITA 8(1)(h) and ITA 8(1)(h.1). Note that the deductions available under ITA 8(1)(i) and ITA 8(1)(j) are not affected by the choice of ITA 8(1)(f) vs. ITA 8(1)(h) and 8(1)(h.1).

The relevant expense deduction calculations are as follows:

	ITA 8(1)(f) (Limited to \$22,310)	ITA 8(1) (h) and (h.1)	ITA 8(1) (i) and (j)
Automobile Costs:			
Operating Costs [(38,000/45,000)(\$11,420)]	\$9,644	\$9,644	-
Financing Costs [(38,000/45,000)(\$2,300)]	-	-	\$1,942
CCA [(38,000/45,000)(\$4,500)]	-	-	3,800
Professional Dues	-	-	375
Work Space In The Home Costs:			
Interest On Mortgage	-	-	-
Property Taxes [(25%)(\$3,850)]	963	-	-
Utilities [(25%)(\$1,875)]	-	-	469
Insurance [(25%)(\$960)]	240	-	-
Maintenance [(25%)(\$3,640)]	-	-	910
Travel Costs	24,600	24,600	-
Non-Deductible Meals [(50%)(\$10,300)] (Note 1)	( 5,150)	( 5,150)	-
Total Golf Club Fees (Note 2)	Nil	-	-
Entertainment (\$845 + \$275)	1,120	-	-
Non-Deductible Entertainment [(50%)(\$1,120)] (Note 3)	( 560)	-	-
<b>Total</b>	<b>\$30,857</b>	<b>\$29,094</b>	<b>\$7,496</b>

**Note 1** Mr. Robinson can deduct 50 percent of his meals while travelling for his employer. Whether the meals are with clients or not does not affect the deductibility.

**Note 2** Golf memberships are not deductible. Since the golf club is located in the city he lives in and where his employer is located, meals with clients there would not be deductible at all as they did not occur while Mr. Robinson was traveling for employment related activities.

**Note 3** Mr. Robinson can deduct 50 percent of the tickets he purchased as entertainment costs. Unlike meals with clients, whether or not the client entertainment occurred while he was travelling does not affect the deductibility. In ITA 8(1)(f) meals anywhere would be deductible (within limitations) if it were not for ITA 8(4) which targets “meals” only as deductible under ITA 8(1)(f) or (h) if they are incurred while away for at least 12 hours. Since the tickets are not “meals” then that overnight restriction would not apply. Salesperson expenses are all deductible when incurred close to home, with meals being the only exception.

The required calculation of minimum Net Employment Income would be as follows:

Salary	\$183,000
Commissions	22,310
Expenses (\$29,094 + \$7,496 - Note 4)	( 36,590)
RPP Contributions (Note 5)	( 3,750)
Awards (\$550 - \$500 + \$200) (Note 6)	250
Stock Option Benefit (Note 7)	875
<u>Net Employment Income</u>	<u>\$166,095</u>

**Note 4** The deduction of dues and other expenses under ITA 8(1)(i) and automobile capital costs (CCA and financing costs) under ITA 8(1)(j) is permitted without regard to other provisions used.

The deduction for work space in the home costs has been split between ITA 8(1)(i) and (f). Since the utilities and maintenance portions can be deducted under ITA 8(1)(i) by any employee, it is not limited by the commission income. The insurance and property tax components are limited as they are deducted under ITA 8(1)(f). A limitation, which is not illustrated in this problem, prevents the deduction of work space in the home costs from creating an employment loss.

As the ITA 8(1)(f) amount is limited to the \$22,310 in commission income, the total deduction using ITA 8(1)(f), (i) and (j), is \$29,806 (\$22,310 + \$7,496).

Using the combination of ITA 8(1)(h), (h.1), (i), and (j) produces a deduction of \$36,590 (\$29,094 + \$7,496). Note that when this approach is used, work space in the home costs are limited to utilities and maintenance. Further, there is no deduction for entertainment costs. However, this approach results in deductions totaling \$6,784 (\$36,590 - \$29,806) more than the amount available using ITA 8(1)(f), (i), and (j) due to the effect of the commission income limit.

**Note 5** The employer’s contributions to the RPP are not considered to be a taxable benefit.

**Note 6** An employee can receive any number of non-cash, non-performance awards and, as long as the total is less than \$500 for the year, there is no taxable benefit. In this case, Mr. Robinson receives non-cash awards of \$550 (\$375 + \$175). The extra \$50 (\$550 - \$500) will have to be included in income. In addition, he will have to include the gift certificate for \$200 as it would be considered a near cash award. Note that he could also have received a long-service award of up to \$500 on a tax free basis. However, it does not appear that such an award was given.

**Note 7** There is an employment income inclusion on the exercise of the stock options of \$875 [(250)(\$14.75 - \$11.25)]. While there is a deduction equal to one-half of this amount available, it is a deduction from Taxable Income and does not enter into the calculation of net employment income. There is also a taxable capital gain on the sale of the 100 shares, but that too does not enter into the calculation of net employment income.

## Solution to Assignment Problem Three - 12

Mr. Brooks' net employment income would be calculated as follows:

Gross Salary		\$63,000
Additions:		
Bonus (Amount Received Only)	\$6,500	
Disability Insurance Receipts (Note One)	4,200	
Personal Benefit On Car (Note Two)	1,034	
Stock Option Benefit [(\$28 - \$23)(200)] (Note Three)	1,000	
Home Relocation Loan Benefit (Note Four)	625	13,359
		<hr/> \$76,359
Deductions:		
RPP Contributions	(\$2,800)	
Union Dues	( 240)	( 3,040)
Net Employment Income		<hr/> \$73,319 <hr/>

**Note One** As all of the premiums were paid by the employer and were not considered to be a taxable benefit, benefits received under this coverage must be included in employment income.

**Note Two** The personal benefit on the company car, taking into consideration the two months he was in the hospital and unable to make use of the car, would be as follows:

Standby Charge [(2/3)(10)(\$678)(5,000/16,670)*]	\$1,356
Operating Cost Benefit - Lesser Of:	
• [(5,000)(\$0.27)] = \$1,350	
• [(1/2)(\$1,356)] = \$678	678
Less: Payments Withheld By Employer	( 1,000)
Taxable Benefit	<hr/> \$1,034 <hr/>

\*[(10)(1,667)]

**Note Three** Although Mr. Brooks would qualify for the deduction of one-half of the stock option benefit under ITA 110(1)(d), it is a deduction from Taxable Income and would not affect the calculation of net employment income.

**Note Four** The taxable benefit associated with the home relocation loan would be calculated as follows:

$$[(\$125,000)(2\% - \text{Nil})(3/12)] = \$625$$

There is a deduction available equal to the benefit associated with an interest free home relocation loan of up to \$25,000. However, the deduction is applied in the calculation of Taxable Income. As a result, the usual ITA 80.4(1) imputed interest benefit is included in net employment income, a figure that is not changed by the deduction.

**Note Five** As it is reasonable to assume that the accounting course would primarily benefit his employer and is not for personal interest, the fees reimbursed by his employer would not create a taxable benefit.

## Solution to Assignment Problem Three - 13

### Part A

The calculations for net employment income would be as follows:

	Offer One	Offer Two
Salary	\$225,000	\$175,000
Commissions	Nil	85,000
Hotel, Meal, And Airline Allowance (Note One)	Nil	N/A
Hotel, Meal, And Airline Reimbursement (Note Two)	N/A	N/A
Automobile Benefit (Note Three)	7,439	N/A
Automobile Allowance [(12)(\$1,500)]	N/A	18,000
Automobile Costs [(37,000/53,000)(\$16,900)]	N/A	( 11,798)
Loan Benefit [(2%)(\$200,000)]	4,000	N/A
Disability Insurance Benefit (Note Four)	Nil	Nil
Life Insurance Benefits (Note Four)	3,800	3,800
Advertising Expense (Note Five)	Nil	( 23,000)
Net Employment Income	\$240,239	\$247,002

**Note One** The \$30,000 per year allowance is considered reasonable and, as a consequence, it does not have to be included in income. In addition, it exceeds the actual costs of \$26,500 (\$18,000 + \$8,500). This means it would not be good tax planning to include the allowance and deduct the actual costs.

**Note Two** Reimbursements have no effect on employment income. They are neither deducted nor included in the determination of Net Employment Income.

**Note Three** The taxable benefit associated with the automobile provided under Offer One would be calculated as follows:

Standby Charge [(2/3)(\$850 - \$75)(12)(16,000 ÷ 20,004*)]	\$4,959
Operating Cost Benefit - Lesser Of:	
• [(16,000)(\$0.27)] = \$4,320	
• [(1/2)(\$4,959)] = \$2,480	2,480
Total Benefit	\$7,439

\* [(12)(1,667)]

**Note Four** The payment of disability insurance premiums by an employer does not create a taxable benefit for employees if the plan provides periodic benefits that compensate for lost employment income. However, the payment of life insurance premiums does create a taxable benefit.

**Note Five** As Ms. Arden does not receive any commissions under Offer One, she cannot deduct her advertising costs. She can deduct the full amount under Offer Two as the \$23,000 total is less than her commissions of \$85,000.

**Part B**

The actual amount of annual cash to be received from the employer under the two offers would be calculated as follows:

	Offer One	Offer Two
Salary	\$225,000	\$175,000
Commissions - Estimated	Nil	85,000
Hotel, Meal, And Airline Allowance	30,000	N/A
Reimbursements	N/A	26,500
Automobile Allowance	N/A	18,000
<b>Total Cash</b>	<b>\$255,000</b>	<b>\$304,500</b>

The fact that Offer Two has significantly higher cash flows and a higher net employment income suggests that Offer Two is preferable. A major factor in this result is that the absence of commissions in Offer One results in the \$23,000 in advertising and promotion expenses not being deductible. This could easily be fixed at no cost to the employer by having an appropriate amount of the \$30,000 allowance treated as a reimbursement of advertising and promotion expenses. This would leave the unreimbursed hotel, meal, and airline costs which could be deducted by Ms. Arden without the presence of commission income.

In addition, other factors that have not been considered in this simple analysis include:

- Offer One includes the provision of an automobile while Offer Two does not. This means that, under Offer One, Ms. Arden could get rid of her personal automobile, resulting in a significant annual savings.
- Offer Two requires using estimates of costs for her personal automobile. There is uncertainty with respect to the amount of these costs. They could be higher or lower than estimated.
- Offer One includes a \$30,000 travel allowance that would not require receipts. Offer Two will reimburse all travel costs which would require all receipts. The additional paperwork would make Offer Two less attractive. However, Offer Two would be more attractive if her actual travel costs total more than \$30,000. If they total less, than Offer One would allow her to keep the difference.
- Offer One includes an interest free loan that will be invested. The fact that these funds will be invested means that there will be a deduction available to offset the \$4,000 benefit on the interest free loan. In addition, Ms. Arden's cash flows are likely to be improved by some amount of return on the investment of the \$200,000 in loan proceeds.
- Offer Two contains an estimate of commissions. Unlike the fixed salary provided in Offer One, there is uncertainty with respect to the amount of these commissions. They could be higher or lower than estimated. There could also be uncertainty related to the timing of the payment of the commissions.

Given these latter considerations, it is difficult to come to a firm conclusion on the two offers. If the invested funds earn a substantial return, she may be better off with Offer One. Correspondingly, it is difficult to quantify the cash flows associated with not owning a personal automobile. In addition, there could be a disadvantage with Offer Two if commission income did not reach the predicted level of \$85,000.

## Solution to Assignment Problem Three - 14

Matilda Bracken's net employment income would be calculated as follows:

Item 1 - Signing Bonus (Note 1)	\$ 12,000
Item 2 - Salary Received (Note 2)	120,125
Item 2 - RPP Contributions	( 3,700)
Item 5 - Bonus Received (Note 2)	5,300
Item 6 - Excess Gift (Note 3)	150
Item 7 - Financial Counseling (Note 4)	1,200
Item 8 - Housing Loss Reimbursement (Note 5)	17,500
Item 9 - Stock Option Benefit (Note 6)	400
Item 10 - CFP Dues Paid	( 1,600)
Item 10 - Employer Reimbursement Of CFP Dues	800
Item 12 - Imputed Interest On Housing Loan (Note 7)	735
Item 13 - Home Office Allowance (Note 8)	2,600
Item 14 - Automobile Benefit (Note 9)	8,867
Item 15 - Stationery And Supplies	( 147)
Item 15 - Long Distance Calls	( 110)
Item 15 - Work Space In The Home (Note 10)	( 1,910)
<b>Net Employment Income</b>	<b>\$162,210</b>

**Note 1** Amounts received prior to, during or after employment are required to be included in employment income when received.

**Note 2** Salary and other forms of remuneration such as bonuses are included in income when received regardless of when earned.

**Note 3** Non-cash gifts of up to \$500 can be received by an employee on a tax free basis. Amounts in excess of \$500 are taxable. The excess \$150 (\$650 - \$500) will be included in Matilda's net employment income.

**Note 4** The provision by an employer of financial counseling services is considered to be a taxable benefit.

**Note 5** Employer-reimbursed housing losses fall into two categories – regular housing losses and eligible housing losses. Eligible housing losses occur when there is an eligible relocation which generally means a relocation or move the expenses of which would qualify for a moving expense deduction had they been paid by the employee. In this case the move is an eligible relocation meaning that the reimbursement qualifies as an eligible housing loss. The employer reimbursed \$50,000 [(50%)(100,000)]. The taxable portion of the loss reimbursement is \$17,500 [(1/2)(50,000 - \$15,000)]. The remaining tax free amount of \$32,500 can be calculated as (\$50,000 - \$17,500) or [\$15,000 + (1/2)(50,000 - \$15,000)].

**Note 6** Despite the fact that the option price was 10 percent below fair market value, the issuance of the stock options does not create employment income. However, when she exercises the option by purchasing shares, there is a benefit as follows:

Market Value At Exercise Date ( $\$7,200 \div 90\%$ )	\$8,000
Option Price	( 7,200)
<b>Value Of Benefit (200 Shares)</b>	<b>\$ 800</b>
<b>Per Share Benefit (<math>\\$800 \div 200</math>)</b>	<b>\$4 Per Share</b>

Since RPL is a CCPC, this benefit can be deferred until the shares are sold. As 100 shares are sold during 2015, \$400 [(100)(\$4 benefit per share)] of this benefit will be included in Ms. Bracken's 2015 net employment income.

In addition to this benefit, there is also a taxable capital gain of \$50 {[1/2][(\$4,100 - (1/2)(\$8,000))]. However, such gains are not part of net employment income.

**Note 7** The imputed interest on this loan would \$735 [(\$220,000)(2%)(61 ÷ 365)]. An acceptable alternative calculation would be \$733 [(\$220,000)(2%)(2 ÷ 12)]. Note that, because this appears to be a home relocation loan, a deduction would be available in the determination of Taxable Income. However, this would have no effect on the required net employment income calculation.

**Note 8** Allowances received are included in employment income unless the allowance is specifically excluded by ITA 6(1)(b). There is no exclusion for this allowance. The amount is \$2,600 [(8)(\$325)].

**Note 9** The automobile benefit would be calculated as follows:

Standby Charge [(2%)(8)(\$45,200)(12,000 ÷ 13,336*)]	\$6,507
Operating Cost Benefit - Lesser Of:	
• [(\$0.27)(12,000)] = \$3,240	
• [(1/2)(\$6,507) = \$3,254	3,240
<hr/>	
Total Benefit	\$9,747
Reimbursement To Employer [(8)(\$110)]	( 880)
<hr/>	
Net Benefit	<u>\$8,867</u>

\*[(8)(1,667)]

**Note 10** Based on floor space, the home office occupies 12 percent of the apartment (150 ÷ 1,250). The work space in the home expenses that may be claimed for the period June 1 to November 30 are the following:

Rent Paid [(7)(\$2,200)]	\$15,400
Electricity Paid	350
Paint	165
<hr/>	
Total Eligible Expenses	\$15,915
Home Office Use	12%
<hr/>	
Deductible Expense	<u>\$ 1,910</u>

## CHAPTER FOUR SOLUTIONS

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### Solution to Assignment Problem Four - 1

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#### Case 1

Leonard Wilkins will qualify for the following credits:

Basic Personal Amount	\$11,327
Spousal (\$11,327 - \$8,720)	2,607
Caregiver Including FCA (\$4,608 + \$2,093)	6,701
<hr/>	
Total Credit Base	\$20,635
Rate	15%
<hr/>	
Total Credits	\$ 3,095
<hr/>	

**Note** The 24 year old disabled child qualifies for both the caregiver and infirm dependant over 17 credits. In such situations, ITA 118(4)(d), in effect, requires the use of the caregiver credit. Also note that, because the 24 year old son is physically infirm, the caregiver credit includes the family caregiver amount.

#### Case 2

Pete Webb will qualify for the following credits:

Basic Personal Amount	\$11,327
Spousal (\$11,327 - \$3,920)	7,407
EI (Maximum)	931
CPP (Maximum)	2,480
Canada Employment	1,146
<hr/>	
Total Credit Base	\$23,291
Rate	15%
<hr/>	
Total Credits	\$ 3,494
<hr/>	

#### Case 3

Candace Hall will qualify for the following tax credits:

Basic Personal Amount	\$11,327
Spousal (\$11,327 - \$5,130)	6,197
Age [\$7,033 - (15%)(\$69,420 - \$35,466)]	1,940
Pension Income	2,000
<hr/>	
Total Credit Base	\$21,464
Rate	15%
<hr/>	
Total Credits	\$ 3,220
<hr/>	

Note that, because her income is below the \$72,809 income threshold, there will be no clawback of Ms. Hall's OAS receipts.

**Case 4**

Gladys Crawford will qualify for the following tax credits:

Basic Personal Amount	\$11,327
Spousal (\$11,327 - \$1,440)	9,887
Medical Expenses (See Note)	21,008
<hr/>	
Total Credit Base	\$42,222
Rate	15%
<hr/>	
Total Credits	\$ 6,333
<hr/>	

**Note** The claim for medical expenses is determined as follows:

Expenses For Gladys, Her Spouse, And Under 18 Children (\$5,150 + \$4,240 + \$2,040 + \$3,220)	\$14,650
Reduced By The Lesser Of:	
• [(3%)(\$126,470)] = \$3,794	
• 2015 Threshold Amount = \$2,208	( 2,208)
20 Year Old's Medical Expenses	\$8,840
Reduced By The Lesser Of:	
• \$2,208	
• [(3%)(\$9,130)] = \$274	( 274)
<hr/>	
Allowable Medical Expenses	\$21,008
<hr/>	

**Case 5**

Austin Schneider will qualify for the following credits:

Basic Personal Amount	\$11,327
Eligible Dependant (\$11,327 - \$4,080)(See Note)	7,247
<hr/>	
Total Credit Base	\$18,574
Rate	15%
<hr/>	
Total Credits	\$ 2,786
<hr/>	

**Note** The eligible dependant credit can be taken for any child. It should not be claimed for the 14 year old as the amount of the credit would be reduced due to his income. As Austin has elected to allocate the Universal Child Care Benefits to his eligible dependant, the base for this credit must be reduced by the UCCB received.

## Solution to Assignment Problem Four - 2

### Case 1

The solution for this Case is as follows:

Tax On First \$44,701		\$ 6,705
Tax On Next \$42,899 (\$87,600 - \$44,701) At 22 Percent		9,438
<hr/>		
Federal Tax Before Credits		\$16,143
Basic Personal Amount	(\$11,327)	
Spousal (\$11,327 - \$8,260)	( 3,067)	
EI	( 931)	
CPP	( 2,480)	
Canada Employment	( 1,146)	
Medical Expenses (See Note)	( 12,563)	
<hr/>		
Credit Base	(\$31,514)	
Rate	15%	( 4,727)
<hr/>		
Federal Tax Payable		\$11,416
<hr/>		

**Note** The base for the medical expense tax credit would be calculated as follows:

John And His Partner		\$ 4,600
Reduced By The Lesser Of:		
• [(3%)(\$87,600)] = \$2,628		
• 2015 Threshold Amount = \$2,208	( 2,208)	
Son's Medical Expenses	\$10,300	
Reduced By The Lesser Of:		
• [(3%)(\$4,300)] = \$129		
• \$2,208	( 129)	10,171
<hr/>		
Total Credit Base		\$ 12,563
<hr/>		

### Case 2

The solution for this Case can be completed as follows:

Tax On First \$138,586		\$29,327
Tax On Next \$4,414 (\$143,000 - \$138,586) At 29 Percent		1,280
<hr/>		
Federal Tax Before Credits		\$30,607
Basic Personal Amount	(\$11,327)	
Spousal (\$11,327 - \$6,100)	( 5,227)	
Caregiver Including FCA - Son (\$4,608 + \$2,093)	( 6,701)	
EI	( 931)	
CPP	( 2,480)	
Canada Employment	( 1,146)	
Transfer From Son (Note)	( 5,000)	
<hr/>		
Credit Base	(\$32,812)	
Rate	15%	( 4,922)
<hr/>		
Federal Tax Payable		\$25,685
<hr/>		

**Note** The son qualifies for both the caregiver tax credit and the infirm dependant over 17 tax credit. In these circumstances, ITA 118(4)(d) effectively requires the use of the caregiver credit. As the son is infirm, the family caregiver amount is added to this credit. Since the son's income is below the income threshold of the caregiver tax credit, the full credit is available. The transfer from the son is as follows:

Tuition Fees	\$ 9,400
Base For Education Credit [(8 Months)(\$400)]	3,200
Base For Textbook Credit [(8 Months)(\$65)]	520
<hr/>	
Total Amount Available	\$13,120
Maximum Transfer	( 5,000)
<hr/>	
Carry Forward (For Son's Use Only)	\$ 8,120
<hr/>	

The son's Tax Payable is completely eliminated by his basic personal credit. He can transfer a maximum of \$5,000 of his education, tuition and textbook amounts to his father. The remaining \$8,120 can be carried forward indefinitely, but must be used by the son.

**Case 3**

The solution for this Case is as follows:

Tax On First \$44,701		\$6,705
Tax On Next \$10,999 (\$55,700 - \$44,701) At 22 Percent		2,420
<hr/>		
Federal Tax Before Credits		\$9,125
Basic Personal Amount	(\$11,327)	
Spousal Including FCA (\$11,327 + \$2,093 - \$8,360)	( 5,060)	
Age [\$7,033 - (15%)(\$55,700 - \$35,466)]	( 3,998)	
Pension	( 2,000)	
Spouse's Age	( 7,033)	
Spouse's Disability	( 7,899)	
Spouse's Pension (= RPP Payments)	( 840)	
<hr/>		
Credit Base	(\$38,157)	
Rate	15%	( 5,724)
<hr/>		
Federal Tax Payable		\$3,401
<hr/>		

As Beverly is infirm, the family caregiver amount is added to the spousal credit. The Old Age Security and Canada Pension Plan receipts are not eligible for the pension income credit, only the Registered Pension Plan receipts are eligible. As Beverly's income is below \$35,466, there is no reduction in her age credit.

**Case 4**

The solution for this Case can be completed as follows:

Tax On First \$89,401		\$16,539
Tax On Next \$2,699 (\$92,100 - \$89,401) At 26 Percent		702
<hr/>		
Federal Tax Before Credits		\$17,241
Basic Personal Amount	(\$11,327)	
Spousal (\$11,327 - \$8,600)	( 2,727)	
Caregiver Including FCA - Marcia's Father (\$4,608 + \$2,093)	( 6,701)	
Caregiver - John's Father [\$4,608 - (\$23,200 - \$15,735)]	Nil	
EI	( 931)	
CPP	( 2,480)	
Canada Employment	( 1,146)	
<hr/>		
Credit Base	\$ 25,312	
Rate	15%	( 3,797)
<hr/>		
Federal Tax Payable		\$ 13,444
<hr/>		

Both fathers qualify for the caregiver credit. In the case of Marcia's father, because he is infirm, the family caregiver amount is added to the credit. In the case of John's father, the family caregiver amount is not added and the caregiver credit is nil as it has been eliminated by his income in excess of the income threshold. Since John's mother is under 65 and healthy, she does not qualify for the caregiver credit.

### Case 5

The solution for this Case would be as follows:

Tax On First \$44,701		\$ 6,705
Tax On Next \$38,299 (\$83,000 - \$44,701) At 22 Percent		8,426
<hr/>		
Federal Tax Before Credits		\$15,131
Basic Personal Amount	(\$11,327)	
EI	( 931)	
CPP	( 2,480)	
Canada Employment	( 1,146)	
<hr/>		
Credit Base	(\$15,884)	
Rate	15%	( 2,383)
Charitable Donations Including FDSC		
[(15%)(200) + (29%)(3,000 - 200) + (25%)(1,000)]		( 1,092)
<hr/>		
Federal Tax Payable		\$11,656
<hr/>		

### Case 6

Since the son is over 18 (the age limit if disabled), the fitness and arts credits are not available. The solution for this Case can be completed as follows:

Tax On First \$89,401		\$16,539
Tax On Next \$24,599 (\$114,000 - \$89,401) At 26 Percent		6,396
<hr/>		
Federal Tax Before Credits		\$22,935
Basic Personal Amount	(\$11,327)	
Eligible Dependant (\$11,327 + \$2,093 - \$8,430)	( 4,990)	
ITA 118(1)(e) Addition	( 1,711)	
Transfer Of Son's Disability	( 7,899)	
<hr/>		
Credit Base	(\$25,927)	
Rate	15%	( 3,889)
<hr/>		
Federal Tax Payable		\$19,046
<hr/>		

The son qualifies for the eligible dependant credit and, because of ITA 118(4)(c), John cannot claim either the infirm dependant over 17 tax credit or the caregiver tax credit. Note that the base for the eligible dependant credit includes the family caregiver amount.

In this situation, ITA 118(1)(e) provides an additional credit based on the amount that the caregiver credit would have exceeded the amount taken for the eligible dependant credit. Given the high income threshold of \$15,735 for the caregiver credit, the son would qualify for the maximum amount of \$6,701 which includes the FCA.

This results in a further addition to the credit base of \$1,711 (\$6,701 - \$4,990).

**Case 7**

The solution for this Case is as follows:

Tax On First \$89,401		\$ 16,539
Tax On Next \$2,899 (\$92,300 - \$89,401) At 26 Percent		754
<hr/>		
Federal Tax Before Credits		\$17,293
Basic Personal Amount	(\$11,327)	
Eligible Dependant - Serena (\$11,327 - \$1,440)	( 9,887)	
Family Caregiver For Mack	( 2,093)	
<hr/>		
Credit Base	(\$23,307)	
Rate	15%	( 3,496)
<hr/>		
Federal Tax Payable		\$13,797
<hr/>		

## Solution to Assignment Problem Four - 3

The federal Tax Before Credits is the same in all five of the cases in this problem. It is calculated as follows:

Tax On First \$89,401	\$16,539
Tax On Next \$6,599 (\$96,000 - \$89,401) At 26 Percent	1,716
<u>Tax Before Credits</u>	<u>\$18,255</u>

### Case A

The solution to this Case can be completed as follows:

Tax Before Credits		\$18,255
Basic Personal Amount	(\$11,327)	
Spousal (\$11,327 - \$6,750)	( 4,577)	
EI	( 931)	
CPP	( 2,480)	
Canada Employment	( 1,146)	
Transfer From Son (Note)	( 5,000)	
Credit Base	(\$25,461)	
Rate	15%	( 3,819)
<u>Federal Tax Payable</u>		<u>\$14,436</u>

**Note:** The transfer from the son is as follows:

Tuition Fees	\$ 9,850
Base For Education Credit [(11 Months)(\$400)]	4,400
Base For Textbook Credit [(11 Months)(\$65)]	715
<u>Total Amount Available</u>	<u>\$14,965</u>
Maximum Transfer	( 5,000)
<u>Carry Forward (For Kenneth's Use Only)</u>	<u>\$ 9,965</u>

Kenneth's Tax Payable is completely eliminated by his basic personal credit. He can transfer a maximum of \$5,000 of his education, tuition and textbook amounts to his father. The remaining \$9,965 can be carried forward indefinitely, but must be used by Kenneth.

### Case B

The solution to this Case can be completed as follows:

Tax Before Credits		\$18,255
Basic Personal Amount	(\$11,327)	
Eligible Dependant - Sheila (\$11,327 - \$720)	( 10,607)	
EI	( 931)	
CPP	( 2,480)	
Canada Employment	( 1,146)	
Interest On Student Loan	( 1,750)	
Credit Base	(\$28,241)	
Rate	15%	( 4,236)
<u>Federal Tax Payable</u>		<u>\$ 14,019</u>

**Case C**

The solution to this Case can be completed as follows:

Tax Before Credits		\$18,255
Basic Personal Amount	(\$11,327)	
Spousal (\$11,327 - \$4,580)	( 6,747)	
EI	( 931)	
CPP	( 2,480)	
Canada Employment	( 1,146)	
Caregiver - Wilbur [\$4,608 - (\$18,450 - \$15,735)]	( 1,893)	
Credit Base	(\$24,524)	
Rate	15%	( 3,679)
Federal Tax Payable		\$ 14,576

As Wilbur is a parent over 64 years of age, he does not have to be infirm to qualify for the caregiver credit. As Samantha is under 65 and healthy, she does not qualify for the caregiver credit. Wallace would make the claim since Sharon would have no Tax Payable. Note that because Wilbur is not mentally or physically infirm, the family caregiver amount is not added to the caregiver credit.

**Case D**

The solution to this Case can be completed as follows:

Tax Before Credits		\$18,255
Basic Personal Amount	(\$11,327)	
Spousal (\$11,327 - \$5,785)	( 5,542)	
EI	( 931)	
CPP	( 2,480)	
Canada Employment	( 1,146)	
Medical Expenses (\$10,300)		
Reduced By The Lesser Of:		
• [(3%)(\$96,000)] = \$2,880		
• 2015 Threshold Amount = \$2,208	2,208	( 8,092)
Credit Base	(\$29,518)	
Rate	15%	( 4,428)
Federal Tax Payable		\$13,827

**Case E**

The solution to this Case can be completed as follows:

Tax Before Credits		\$18,255
Basic Personal Amount	(\$11,327)	
EI	( 931)	
CPP	( 2,480)	
Canada Employment	( 1,146)	
Credit Base	(\$15,884)	
Rate	15%	( 2,383)
Political Contributions Tax Credit		
[(3/4)(\$400) + (1/2)(\$350) + (1/3)(\$450)]		( 625)
Charitable Donations [(15%)(200) + (29%)(50,000 - 200)]		( 14,472)
Federal Tax Payable		\$ 775

Unused charitable donations can be carried forward for up to five years. The limitation of 75 percent of Net Income For Tax Purposes would have given Wallace a maximum credit

based on \$72,000 [(75%)(96,000)] in charitable donations.

By claiming \$50,000 of his donation, this leaves Wallace with \$50,000 (\$100,000 - \$50,000) in charitable donations that can be carried forward for five years. He will be subject to the 75 percent limitation of Net Income For Tax Purposes in any year he claims the charitable donations.

Regardless of whether Wallace might be considered mentally infirm or not, the family caregiver amount is not available as it can only be claimed for a dependant.

## Solution to Assignment Problem Four - 4

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Mr. Brooks' net employment income would be calculated as follows:

Gross Salary		\$63,000
Additions:		
Bonus (Amount Received Only)	\$6,500	
Disability Insurance Receipts (Note One)	4,200	
Personal Benefit On Car (Note Two)	1,034	
Stock Option Benefit [(\$28 - \$23)(200)] (Note Three)	1,000	
Home Relocation Loan Benefit (Note Four)	625	13,359
		<hr/>
		\$76,359
Deductions:		
RPP Contributions	(\$2,800)	
Union Dues	( 240)	( 3,040)
		<hr/>
Net Employment Income		\$73,319
		<hr/>

**Note One** As all of the premiums were paid by the employer and were not considered to be a taxable benefit, benefits received under this coverage must be included in employment income.

**Note Two** The personal benefit on the company car, taking into consideration the two months he was in the hospital and unable to make use of the car, would be as follows:

Standby Charge [(2/3)(10)(\$678)(5,000/16,670)*]	\$1,356
Operating Cost Benefit - Lesser Of:	
• [(5,000)(\$0.27)] = \$1,350	
• [(1/2)(\$1,356)] = \$678	678
Less: Payments Withheld By Employer	( 1,000)
	<hr/>
Taxable Benefit	\$1,034
	<hr/>

\*[(10(1,667))]

**Note Three** Although Mr. Brooks would qualify for the deduction of one-half of the stock option benefit under ITA 110(1)(d), it is a deduction from Taxable Income and would not affect the calculation of net employment income.

**Note Four** The taxable benefit associated with the home relocation loan would be calculated as follows:

$$[(\$125,000)(2\% - \text{Nil})(3/12)] = \$625$$

### Taxable Income

Mr. Brooks' Taxable Income would be calculated as follows:

Net Income For Tax Purposes = Net Employment Income	\$73,319
Stock Option Deduction [(1/2)(\$1,000)]	( 500)
Home Relocation Loan Deduction - Lesser Of:	
• Benefit Included In Income = \$625	
• [(\$25,000)(2% - Nil)(3/12)] = \$125	( 125)
	<hr/>
Taxable Income	\$72,694
	<hr/>

**Tax Payable**

Mr. Brooks' federal Tax Payable (Refund) would be calculated as follows:

Tax On First \$44,701		\$ 6,705
Tax On Next \$27,993 (\$72,694 - \$44,701) At 22 Percent		6,158
<hr/>		
Federal Tax Before Credits		\$12,863
Basic Personal Amount	(\$11,327)	
Eligible Dependant Including FCA - Harold (\$11,327 + \$2,093 - \$720) (Note Five)	( 12,700)	
Transfer Of Harold's Disability	( 7,899)	
Transfer Of Harold's Disability Supplement	( 4,607)	
Caregiver - Mother (Note Six)	( 4,608)	
EI Premiums	( 931)	
CPP Contributions	( 2,480)	
Canada Employment	( 1,146)	
Public Transit Passes (Note Seven)	( 860)	
Medical Expenses (Note Eight)	( 10,590)	
Tuition Fee - Unreimbursed Music Course (Note Nine)	( 600)	
First Time Home Buyer's	( 5,000)	
<hr/>		
Credit Base	(\$62,748)	
Rate	15%	( 9,412)
<hr/>		
Charitable Donations [(15%)(\$200) + (29%)(\$480 - \$200)]		( 111)
<hr/>		
Net Federal Tax		\$ 3,340
Federal Income Tax Withheld		( 3,000)
<hr/>		
Federal Tax Payable		\$ 340
<hr/>		

**Note Five** Harold qualifies for the family caregiver amount. The Universal Child Care Benefit has reduced the base for the eligible dependant credit.

**Note Six** Mr. Brooks is eligible for the caregiver credit for his mother as she is over 64 years of age and her income is below the threshold for the caregiver credit. This means that Mr. Brooks can claim the full amount of the caregiver credit. As she is not infirm, the family caregiver amount is not available for her.

**Note Seven** Mr. Brooks cannot claim the cost of the transit passes for his mother. As a result, the base for the public transit pass credit is \$860 [(10)(\$26 + \$60)].

**Note Eight** Allowable medical expenses are as follows:

Mr. Brooks' And Minor Child (Harold) Medical Expenses (\$9,300 + \$2,450)		\$11,750
Reduced By The Lesser Of:		
• [(3%)(\$73,319)] = \$2,200		
• 2015 Threshold Amount = \$2,208	( 2,200)	
<hr/>		
Grace's Medical Expenses	\$1,265	
Reduced By The Lesser Of:		
• \$2,208		
• [(3%)(\$7,500)] = \$225	( 225)	1,040
<hr/>		
Allowable Medical Expenses		\$10,590
<hr/>		

**Note Nine** Since the music course was less than three consecutive weeks in duration, Mr. Brooks cannot claim the education or textbook credit for that course. As the accounting course tuition fees were reimbursed by his employer, no education or textbook credits are available for that course either.

## Solution to Assignment Problem Four - 5

### Part 1 - Net Income For Tax Purposes

As Mr. Cousteau's only income is from employment, his Net Income For Tax Purposes is equal to Net Employment Income. The required amount would be calculated as follows:

Salary	\$70,000
Additions	
Bonus (\$5,000 ÷ 5)	1,000
Salary Deferral Benefit (Bonus Past 2018)	1,000
Performance Award (Briefcase)	800
Christmas Basket (\$600 - \$500)	100
Loan Benefit (Note 1)	6,250
Automobile Benefit (Note 2)	10,899
Employer Paid Premium On Life Insurance	600
Deductions	
RPP Contributions	( 1,200)
Professional Association Dues	( 900)
<b>Net Income For Tax Purposes</b>	<b>\$88,549</b>

**Note 1** The home loan benefit would be calculated as follows:

Taxable Benefit Under ITA 80.4(1)(a) - Lesser Of:

- $[(3\%)(2/4)(\$500,000) + (2\%)(1/4)(\$500,000)] = \$10,000$
- $[(3\%)(3/4)(\$500,000)] = \$11,250$  \$10,000

Reduction For Payments Under ITA 80.4(1)(c)  $[(1\%)(\$500,000)(3/4)]$  ( 3,750)

**Total ITA 80.4(1) Benefit = Addition To Net Income For Tax Purposes** **\$ 6,250**

Mr. Cousteau can continue to use the rate in effect at the time the loan was made to calculate the taxable benefit for up to five years. However, since the rate has decreased, it is more advantageous for him to use the current rate instead.

**Note 2** On the Vancouver vehicle, employment usage was less than 50 percent. This means the reduced standby charge and the alternative operating cost benefit calculation are not available. The automobile benefit would be calculated as follows:

Toronto Standby Charge $[(2/3)(\$875 - \$50)(3)(3,000/5,001*)]$	\$ 990
Toronto Operating Cost Benefit - Lesser Of:	
• $[(\$0.27)(3,000)] = \$810$	
• $[(1/2)(\$990)] = \$495$	495
Vancouver Standby Charge $[(2\%)(\$31,300)(9)]$	5,634
Vancouver Operating Cost Benefit $[(\$0.27)(14,000)]$	3,780
<b>Total</b>	<b>\$10,899</b>

\* $[(3)(1,667)]$

### Other Notes:

- A bonus that is payable more than 3 years after the end of the year in which an employee provides services is a salary deferral arrangement and must be included in income.
- Performance awards are fully taxable.
- The exempt portion of non-cash gifts is limited to \$500.
- As the housing loan was related to a re-location, there will be an offsetting deduction in the calculation of Taxable Income.
- While employer payments for life insurance premiums are a taxable benefit, employer contributions to RPPs are not a benefit.

**Part 2 - Taxable Income**

Mr. Cousteau's Taxable Income would be calculated as follows:

Net Income For Tax Purposes	\$88,549
Home Relocation Loan Deduction - Lesser Of:	
• ITA 80.4(1) Benefit = \$6,250	
• $[(3\%)(2/4)(\$25,000) + (2\%)(1/4)(\$25,000)] = \$500$	( 500)
<u>Taxable Income</u>	<u>\$88,049</u>

The deduction is calculated as if the loan had been for \$25,000 rather than \$500,000, using the same interest rates.

**Part 3 - Federal Tax Payable**

Mr. Cousteau's federal Tax Payable would be calculated as follows:

Tax On First \$44,701	\$ 6,705
Tax On Next \$43,348 (\$88,049 - \$44,701) At 22 Percent	9,537
<u>Tax Before Credits</u>	<u>\$16,242</u>
Credits:	
Basic Personal Amount	(\$11,327)
Spousal Including FCA	
(\$11,327 + \$2,093 - \$9,000)	( 4,420)
Disability Transfer From Spouse	( 7,899)
Caregiver Including FCA - Manny (Note 3)	( 6,701)
Infirm Dependant Over 17 - Jay (Note 4)	( 4,920)
Child Fitness (Dance Lessons) - Maximum	( 1,000)
First Time Home Buyer	( 5,000)
CPP	( 2,480)
EI	( 931)
Canada Employment	( 1,146)
Medical Expenses (Note 5)	( 3,167)
	(\$48,991)
Rate	15%
	( 7,349)
Charitable Donations	
$[(15\%)(\$200) + (29\%)(\$1,500 + \$500 - \$200)]$	( 552)
<u>Federal Tax Payable Before Withholding</u>	<u>\$ 8,341</u>
Amounts Withheld	( 8,500)
<u>Balance Owing (Refund)</u>	<u>(\$ 159)</u>

**Note 3** Manny qualifies for both the caregiver credit and the infirm dependant over 17 credit. In these circumstances, ITA 118(4)(d) effectively requires the use of the caregiver credit. Because Manny is infirm, and his income is below the threshold for the caregiver credit, Mr. Cousteau can claim the full amount of the caregiver credit, as well as the family caregiver amount.

**Note 4** Jay does not qualify for the caregiver credit as he does not reside with Phil. He would, however, qualify for the infirm dependant over 17 credit which includes the family caregiver amount. This results in a credit of \$4,920  $[(\$6,700 - (\$8,500 - \$6,720))]$ . Note there is no provision for the transfer of a parent's age or pension credit.

**Note 5** The base for the medical expense tax credit can be calculated as follows:

Phil, Claire, And Haley (\$650 + \$1,940 + \$860)		\$3,450
Reduced By The Lesser Of:		
• [(3%)(\$88,549)] = \$2,656		
• 2015 Threshold Amount = \$2,208		( 2,208)
Manny	\$1,250	
Reduced By The Lesser Of:		
• [(3%)(\$15,000)] = \$450		
• \$2,208	( 450)	800
Cameron	\$480	
Reduced By The Lesser Of:		
• [(3%)(\$3,000)] = \$90		
• \$2,208	( 90)	390
Jay	\$990	
Reduced By The Lesser Of:		
• [(3%)(\$8,500)] = \$255		
• \$2,208	( 255)	735
<u>Total</u>		<u>\$3,167</u>

**Note 6** Although Mr. Cousteau can claim Cameron's allowable medical expenses, he cannot claim a credit for Cameron as he is not infirm.

## Solution to Assignment Problem Four - 6

### Part A

Lydia's minimum Net Income For Tax Purposes would be calculated as follows:

Salary	\$73,500
Additions:	
Bonus (Note 1)	6,000
Stock Options (Note 2)	Nil
Automobile Benefit (Note 3)	1,176
Gifts (Note 5)	650
Interest Free Loan Benefit (Note 6)	1,333
Deductions:	
RPP Contributions	( 2,600)
Professional Dues	( 350)
Client Meals And Entertainment (Note 4)	Nil
<u>Net Income For Tax Purposes</u>	<u>\$79,709</u>

**Note 1** The \$4,000 that will be paid in 2016 is not included in Net Income For Tax Purposes until it is paid. However, the amount that will be paid in 2019 is a salary deferral arrangement and, given this, it will have to be included in 2015 Net Income For Tax Purposes.

**Note 2** The stock option benefit would be calculated as follows:

$$[(200)(\$90 - \$72)] = \$3,600$$

Since the employer is a CCPC, the taxation of this benefit is deferred until the shares are sold. Note that, because the option price was less than the fair market value of the shares at the time the options were granted, no ITA 110(1)(d) deduction will be available in the determination of Taxable Income when they are sold. However, if she holds the shares for more than 2 years before selling, she will be eligible for the ITA 110(1)(d.1) deduction.

**Note 3** The automobile benefit would be calculated as follows:

Standby Charge $[(2/3)(11)(\$565 - \$75)(4,000 \div 18,337^*)]$	\$ 784
Operating Cost Benefit - Lesser Of:	
• $[(1/2)(\$784)] = \$392$	
• $[(\$0.27)(4,000)] = \$1,080$	392
<u>Total Benefits</u>	<u>\$1,176</u>

$$*[(11)(1,667)]$$

As Lydia's employment related use was more than 50 percent, the reduced standby charge is available. In addition, she can use the alternative calculation of the operating cost benefit.

**Note 4** Lydia's meal and entertainment costs exceed her employer's reimbursement by \$2,400 (\$5,600 - \$3,200). However, as she has no commission income, she cannot deduct these out-of-pocket costs.

**Note 5** The gift certificate for \$150 is taxable because it is a near-cash gift. The first \$500 of the long-service award will not be a taxable benefit. However, the excess of \$500 (\$1,000 - \$500) will be a taxable benefit. As the value of the Christmas gift basket is under \$500, it will not create a taxable benefit. The total taxable benefit for gifts is \$650 (\$150 + \$500).

**Note 6** The taxable benefit on the loan is calculated as follows:

$$[(2\%)(\$100,000)(8/12)] = \$1,333$$

**Part B**

As there are no Division C deductions, Lydia's Taxable Income would be equal to her Net Income For Tax Purposes. The problem states that the loan does not qualify as a home relocation loan. There would be no stock option deduction as there was no stock option benefit.

**Part C**

Based on the Taxable Income calculated in Part B, Lydia's Tax Payable would be calculated as follows:

Tax On First \$44,701		\$ 6,705
Tax On Next \$35,008 (\$79,709 - \$44,701) At 22 Percent		7,702
<hr/>		
Tax Before Credits		\$14,407
Credits:		
Basic Personal Amount	(\$11,327)	
Spousal		
(\$11,327 - \$8,600)	( 2,727)	
Caregiver Including FCA - Mary (Note 7)	( 6,701)	
Transfer Of Harry's Education		
Related Credits (Note 8)	( 3,327)	
First Time Home Buyers (Maximum)	( 5,000)	
Transit Passes [(\$110)(1)(10)] (Note 9)	( 1,100)	
EI Premiums	( 931)	
CPP Contributions	( 2,480)	
Canada Employment	( 1,146)	
Medical Expenses (Note 10)	( 19,176)	
<hr/>		
Credit Base	(\$53,915)	
Rate	15%	( 8,087)
<hr/>		
Charitable Donations		
[(15%)(200) + (29%)(2,000 - 200)]		( 552)
<hr/>		
Federal Tax Payable		\$ 5,768
<hr/>		

**Note 7** Mary is eligible for both the infirm dependant over 17 and the caregiver tax credits. In these circumstances, ITA 118(4)(d), in effect, requires the use of the caregiver credit. Because Mary is infirm, and her income is below the threshold for the caregiver credit, Lydia can claim the full amount of the caregiver credit, as well as the family caregiver amount.

**Note 8** Harry's total education related amounts are calculated as follows:

Tuition	\$11,300
Education [(8)(\$400)]	3,200
Textbook [(8)(\$65)]	520
<hr/>	
Total	\$15,020
<hr/>	

Harry will have to reduce his own Tax Payable to nil before transferring any credits. He will require \$1,673 [\$14,100 - \$11,327 - (\$110)(10)] of this amount. Since he is over 18, he must claim the credit for his transit passes. This means that his transfer will be limited to \$3,327 (\$5,000 - \$1,673). This will leave Harry with a carry forward of \$10,020 (\$15,020 - \$5,000). The residence costs are not eligible for a credit.

**Note 9** The transit pass credit can only be claimed for children who have not attained the age of 19 during the year. Although she has paid for them, Lydia cannot claim Harry's transit passes. Harry has claimed them in the Note 8 calculation.

**Note 10** There are three medical expenses in the problem that do not qualify for the medical expenses tax credit, Botox treatment, hair replacement procedures and liposuction. (These exclusions are listed in the textbook.) All of the allowable medical expenses of Lydia, Mark and Barry are eligible for reimbursement from the health care plan and the reimbursement is deducted. As both Mary and Harry are older than 18, their expenses are not eligible for reimbursement.

The base for Lydia's medical expense credit can be calculated as follows:

Lydia - Prescriptions		\$2,500
Lydia - Botox treatments		Nil
Mark - Dentist's fees for root canals (3)		7,200
Mark - Hair replacement procedures		Nil
Barry - Dentist's fees, including \$1,000 for a tooth replacement		2,100
<hr/>		
Allowable Medical Expenses		\$11,800
Reimbursement [(50%)(11,800)]		( 5,900)
Reduced By The Lesser Of:		
• [(3%)(79,709)] = \$2,391		
• 2015 Threshold Amount = \$2,208		( 2,208)
Mary's Allowable Medical Expenses		
(\$8,400 + \$3,900 + Nil)	\$12,300	
Reduced By The Lesser Of:		
• \$2,208		
• [(3%)(3,100)] = \$93	( 93)	12,207
Harry's Allowable Medical Expenses		
(\$1,500 + \$2,200)	\$3,700	
Reduced By The Lesser Of:		
• \$2,208		
• [(3%)(14,100)] = \$423	( 423)	3,277
<hr/>		
Allowable Medical Costs		\$19,176
<hr/>		

## Solution to Assignment Problem Four - 7

### Part A

#### Net Income For Tax Purposes

Marvin's minimum Net Income For Tax Purposes would be calculated as follows:

Salary	\$112,468
Additions:	
Bonus (Amounts Received After 2018 - Salary Deferral Arrangement)	20,000
Automobile Benefit (Note 1)	991
Stock Options (Note 2)	3,900
Gifts (Note 3)	1,800
Client Meals And Entertainment (Note 4)	Nil
Interest Free Loan Benefit (Note 5)	3,000
Deductions:	
RPP Contributions	( 6,800)
Professional Association Dues	( 3,400)
<b>Net Income For Tax Purposes</b>	<b>\$131,959</b>

**Note 1** The automobile benefit would be calculated as follows:

Standby Charge $[(2/3)(10)(\$456 - \$43)(4,000 \div 16,670^*)]$	\$661
Operating Cost Benefit - Lesser Of:	
• $[(1/2)(\$661)] = \$330$	
• $[(\$0.27)(4,000)] = \$1,080$	330
<b>Total Benefits</b>	<b>\$991</b>

$$*[(10)(1,667)]$$

As Marvin's employment related use was more than 50 percent, the reduced standby charge is available. In addition, he can use the alternative calculation of the operating cost benefit.

**Note 2** The stock option benefit would be calculated as follows:

$$[(300)(\$85 - \$72)] = \$3,900$$

**Note 3** The \$1,200 Employee Of The Month Award is performance related and would be a taxable benefit. Also a taxable benefit would be the \$600 gift certificate as it is a near cash gift. The Christmas basket is under the \$500 limit and would not be a taxable benefit. The total taxable benefit would be \$1,800 (\$1,200 + \$600).

**Note 4** Marvin's meal and entertainment costs exceed his employer's reimbursement by the \$1,000 that were not reimbursed. However, as he has no commission income, he cannot deduct these out-of-pocket costs.

**Note 5** The taxable benefit on the loan is calculated as follows:

$$[(2\%)(\$200,000)(9/12)] = \$3,000$$

**Taxable Income**

Since the loan was not a home relocation loan, there is no deduction from Taxable Income available. Marvin's Taxable Income would be calculated as follows:

Net Income For Tax Purposes	\$131,959
Stock Option Deduction [(1/2)(\$3,900)]	( 1,950)
<u>Taxable Income</u>	<u>\$130,009</u>

Leslie's Taxable Income would be equal to her Net Income For Tax Purposes of \$8,460.

**Marvin's Base Tax Payable**

Based on the Taxable Income calculated in Part B, Marvin's Base Tax Payable would be calculated as follows:

Tax On First \$89,401	\$16,539
Tax On Next \$40,608 (\$130,009 - \$89,401) At 26 Percent	10,558
<u>Tax Before Credits</u>	<u>\$27,097</u>
Non-Refundable Credits Other Than Donations:	
Basic Personal Amount	(\$11,327)
Spousal Including FCA	
(\$11,327 + \$2,093 - \$8,460)	( 4,960)
Caregiver Including FCA - Suzanne (Note 6)	( 6,701)
Transfer Of Leslie's Disability	( 7,899)
Transfer Of Samantha's Education	
Related Credits (Note 7)	( 3,527)
First Time Home Buyers (Maximum)	( 5,000)
EI Premiums	( 931)
CPP Contributions	( 2,480)
Canada Employment	( 1,146)
Medical Expenses (Note 8)	( 17,290)
<u>Credit Base</u>	<u>(\$61,261)</u>
Rate	15%
	( 9,189)
Charitable Donations Including FDSC	
[(15%)(\$200) + (29%)(\$2,500 - \$200) + (25%)(\$1,000)]	( 947)
<u>Marvin's Basic Tax Payable</u>	<u>\$16,961</u>

**Note 6** Suzanne is eligible for both the infirm dependant over 17 and the caregiver tax credits. In these circumstances, ITA 118(4)(d), in effect, requires the use of the caregiver credit. Because Suzanne is infirm, and her income is below the threshold for the caregiver credit, Marvin can claim the full amount of the caregiver credit, as well as the family caregiver amount.

**Note 7** Samantha's total education related amounts are calculated as follows:

Tuition	\$10,300
Education [(11)(\$400)]	4,400
Textbook [(11)(\$65)]	715
<u>Total</u>	<u>\$15,415</u>

Samantha will have to reduce her own Tax Payable to nil before transferring any credits. She will require \$1,473 [\$12,800 - \$11,327] of this amount. This means that his transfer will be limited to \$3,527 (\$5,000 - \$1,473). This will leave Samantha with a carry forward of \$10,415 (\$15,415 - \$5,000).

**Note 8** It would appear that the rhinoplasty surgery for Samantha is purely cosmetic in nature. As a consequence, it is not an eligible medical expense. Sharon's rhinoplasty surgery appears to be medically required and would be allowable. The base for Marvin's medical expense credit can be calculated as follows:

Marvin, Leslie, And Sharon (\$2,200 + \$3,100)		\$ 5,300
Reduced By The Lesser Of:		
• [(3%)(\$131,959)] = \$3,959		
• 2015 Threshold Amount = \$2,208	( 2,208)	
Suzanne's Medical Expenses	\$12,300	
Reduced By The Lesser Of:		
• \$2,208		
• [(3%)(\$7,250)] = \$218	( 218)	12,082
Samantha's Allowable Medical Expenses (\$16,000 - \$13,500)	\$2,500	
Reduced By The Lesser Of:		
• \$2,208		
• [(3%)(\$12,800)] = \$384	( 384)	2,116
Allowable Medical Costs		<u>\$17,290</u>

**Note 9** Since Sharon is 17 and healthy, she does not qualify for the fitness credit.

**Leslie's Base Tax Payable**

Leslie's Base Tax Payable would be calculated as follows:

Tax Before Credits [(15%)(\$8,460)]	\$1,269
Basic Personal Credit [(15%)(\$11,327)]	( 1,699)
Leslie's Base Tax Payable	<u>Nil</u>

**Combined Base Tax Payable**

The combined Base Tax Payable for Marvin and Leslie would be \$16,961 (\$16,961 + Nil).

**Part B**

**The Required Transfer**

In calculating the combined Adjusted Base Tax Payable, the required transfer would be the lesser of \$50,000 and \$60,775 [(\$130,009 - \$8,460) ÷ 2]. Transferring the lesser amount of \$50,000 will leave Marvin with Adjusted Taxable Income of \$80,009 (\$130,009 - \$50,000) and Leslie with Adjusted Taxable Income \$58,460 (\$8,460 + \$50,000).

**Leslie's Adjusted Base Tax Payable**

Leslie's Adjusted Base Tax Payable would be calculated as follows:

Tax On First \$44,701	\$6,705
Tax On Next \$13,759 (\$58,460 - \$44,701) At 22 Percent	3,027
Tax Payable Before Credit	\$9,732
Basic Personal Credit [(15%)(\$11,327)]	( 1,699)
Leslie's Adjusted Base Tax Payable	<u>\$8,033</u>

**Marvin's Adjusted Base Tax Payable**

Marvin's Adjusted Base Tax Payable would be calculated as follows:

Tax On First \$44,701		\$6,705
Tax On Next \$35,308 (\$80,009 - \$44,701) At 22 Percent		7,768
		<hr/>
Tax Before Credits		\$14,473
Non-Refundable Credits Other Than Donations:		
Basic Personal Amount	(\$11,327)	
Spousal Including FCA		
(\$11,327 + \$2,093 - \$8,460)	( 4,960)	
Caregiver Including FCA - Suzanne (Note 6)	( 6,701)	
Transfer Of Leslie's Disability	( 7,899)	
Transfer Of Samantha's Education		
Related Credits (Note 7)	( 3,527)	
First Time Home Buyers (Maximum)	( 5,000)	
EI Premiums	( 931)	
CPP Contributions	( 2,480)	
Canada Employment	( 1,146)	
Medical Expenses (Note 9)	( 17,290)	
		<hr/>
Credit Base Before Spousal Adjustment	(\$61,261)	
Spousal Adjustment (\$11,327 - \$8,460)	2,867	
		<hr/>
Credit Base	(\$58,394)	
Rate	15%	( 8,759)
		<hr/>
Charitable Donations Including FDSC		
[(15%)(\$200) + (29%)(\$2,500 - \$200) + (25%)(\$1,000)]		( 947)
		<hr/>
Marvin's Adjusted Basic Tax Payable		\$ 4,767
		<hr/>

Note that the non-refundable credits claimed here are the same as those used in the determination of Marvin's Base Tax Payable (we have not duplicated the calculations here, but simply referred to the notes that were provided with the Base Tax Payable calculation). The difference is the spousal adjustment which, in effect, removes the basic spousal credit amount of \$2,867, while leaving the Family Caregiver Amount intact.

**Combined Adjusted Base Tax Payable**

The combined Adjusted Base Tax Payable would total \$12,800 (\$8,033 + \$4,767).

**Part C**

The 2015 Family Tax Cut for Marvin and Leslie would be the lesser of \$2,000 and \$4,161 (\$16,961 - 12,800). The lesser figure is \$2,000.

**Part D**

The combined Tax Payable for Marvin and Leslie, after the application of the Family Tax Cut would be calculated as follows:

Marvin's Tax Payable Before The Family Tax Cut		
(Same As Base Tax Payable)		\$16,961
Leslie's Tax Payable (Same As Base Tax Payable)		Nil
Family Tax Cut - Maximum		( 2,000)
		<hr/>
Combined Tax Payable After The Family Tax Cut		\$14,961
		<hr/>

## Solution to Problem Tax Software Four - 1

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This problem and solution contain 2014 (not 2015) information as software for 2015 is not yet available. Shortly after the first filing version of the 2015 Intuit ProFile software is available in January, 2016, the updated 2015 version of this problem will be available on the textbook web site at:

**[www.pearsoncanada.ca/byrdchen/ctp2016](http://www.pearsoncanada.ca/byrdchen/ctp2016)**

The complete tax return is available in both ProFile and PDF format at the Instructor's Resource Centre on the online catalogue listing for this book, at:

**[catalogue.pearsoned.ca](http://catalogue.pearsoned.ca)**

For more information on how to use the ProFile tax program, please refer to the sample tax returns in the Study Guide.

### **Analysis**

The Family Tax Cut has no value in this version of the problem as neither Mr. Musician nor his wife has any tax payable.

Since Mr. Musician's Net Income For Tax Purposes is only his employment income of \$16,500, his Tax Payable before credits is only \$2,475 [(15%)(16,500)], less than his available non-refundable credits. Given this, he should not claim credits that can either be used by others or carried forward to subsequent years.

Based on this approach, he should not transfer any of the education related amounts as Robert and Sarah can carry forward these amounts indefinitely.

He would also not claim the credit for charitable donations as it can be carried forward for five years.

Medical expenses can also be carried forward to the following year, but the problem states that Mr. Musician wishes to claim his medical expenses on a calendar year basis. Given all his allowable medical expenses are eligible for the refundable medical expense supplement, it would be advisable for him not to carry forward any medical expenses.

Based on this analysis, his total credits will exceed his Tax Payable in this version of the problem. However, there are no further alternatives for using or carrying forward any other credits.

### **Notes To Tax Return**

- When the Universal Child Care Benefits are input on Buddy's Form RC62, the amounts will be transferred to show on S2 as Natasha's income.
- Mr. Musician can claim the caregiver tax credit for both his father and mother. He can claim the full amount because neither has income in excess of the threshold. Eunice's caregiver tax credit includes the family caregiver amount. Earl's caregiver tax credit does not as he is not disabled.
- The ITA 118(1)(d) infirm dependant over 17 tax credit is only available for dependants who have attained the age of 18 by the end of the year and are dependent because of mental or physical infirmity. The only dependant of Mr. Musician who satisfies these criteria is his mother. However, since he is claiming the caregiver tax credit for her, he cannot claim this credit for her.
- Mr. Musician's mother's unused disability tax credit can be transferred to him. If she filed a tax return, her age credit (which cannot be transferred to Buddy) would eliminate any Tax Payable.
- The medical expense rules require that the medical expense payments be paid in respect of medical services provided to persons who are dependants of Buddy within the meaning of ITA 118(6). ITA 118(6) requires that the persons be dependent on Buddy at some point

during the year for support and that they are his children. Since it is stated in the problem that the children of Ms. Nurse and Mr. Musician are not dependent on him for support, Megan's medical expenses cannot be claimed by him.

- An individual can claim a tax credit based on the medical expenses of a spouse and any other individual who meets the ITA 118(6) definition of a dependant. The medical expenses of Lori Musician (\$300) and Dolly Nurse (\$675) would not be eligible as neither woman is his spouse or common-law partner.

### **Tax Planning Points**

- Richard, Sarah, Eunice, and Earl should all file tax returns in order to receive the GST credit. Filing a tax return will also make the unused education related tax credits of Richard and Sarah easier to keep track of for carry forward purposes. Sarah, Eunice, and Earl will need to have a Social Insurance Number to file returns.
- Buddy has paid installments based on the CRA's Instalment Reminders. Given the amount of his refund, they were unnecessary. Buddy should review his estimated net tax owing periodically in the future to determine whether instalments should be paid.
- Buddy has paid the dental expenses for Ms. Nurse and Megan Nurse, but cannot claim them as Ms. Nurse is not a spouse and Megan is not a dependant of Buddy's. Ms. Nurse cannot claim the dental expenses as she has not paid for them. If there is an agreement between Buddy and Ms. Nurse that requires him to pay her and their children's dental and medical expenses, or he chooses to pay these costs for other reasons, it would be better from a tax point of view if Buddy gave Ms. Nurse the funds to pay the medical expenses rather than pay them personally. That way Ms. Nurse could claim the expenses that he cannot.
- Since Buddy cannot deduct Lori Musician's medical expenses either, it would be better from a tax point of view if he gave Lori the funds to pay her own expenses so that she can claim them.

## Solution to Problem Tax Software Four - 2

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This problem and solution contain 2014 (not 2015) information as software for 2015 is not yet available. Shortly after the first filing version of the 2015 Intuit ProFile software is available in January, 2016, the updated 2015 version of this problem will be available on the textbook web site at:

**[www.pearsoncanada.ca/byrdchen/ctp2016](http://www.pearsoncanada.ca/byrdchen/ctp2016)**

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### **Notes To Tax Return**

- Mr. Pharmacy claims the maximum Family Tax Cut of \$2,000 as you would expect.
- Since Valerie's father David is not a Canadian resident, he cannot be claimed as a dependant. His medical expense cannot be claimed either.
- Valerie's age credit is transferred to George as her Net Income For Tax Purposes is less than the basic personal amount.
- On the Dependants form, for Kevin and Joan the question "Qualify for family caregiver amount?" must be answered yes. Given the doctor's letter, Joan would qualify.
- Kevin's disability credit for all ages and his disability supplement credit for under 18 are transferred to George. The \$3,500 in childcare costs will decrease the disability supplement available and is entered on the Dependants form.
- On the Dependants form for Kevin, the \$700 child fitness amount and the \$250 children's arts amount should be input. The program will automatically add the \$500 supplements for disabled children on Schedule 1.
- Martin's education related credits can only be transferred to a spouse, parent, or grandparent. As a result, they cannot be transferred to George and must be carried forward by Martin for his own use.
- Although it will not affect George Pharmacy, Martin should file his tax return to receive the GST credit. Filing a tax return will also make his education related tax credits easier to keep track of for carry forward purposes.
- Joan Drugstore should file a tax return to receive the GST credit. She would need a Social Insurance Number before she can file a return.
- The reimbursement of George's employment expenses has no effect on his income taxes.
- The cost of a residential phone line, the internet connection, mortgage interest, and mortgage life insurance premiums cannot be deducted as work space in the home costs. George's work space in the home expenses are input on form T777Details. George lives in Ontario, so his expenses would normally include HST. Since we are ignoring HST implications, this means that we are ignoring the GST/HST rebate. At the top of the T777Details form "Do you qualify for the GST/HST Rebate?" is answered "No". With that box ticked, it does not make a difference to the calculations what column the expenses are put into.
- The new computer and software are capital assets and no part of their cost can be deducted as an employment expense.

## Solution to Problem Tax Software Four - 3

This problem and solution contain 2014 (not 2015) information as software for 2015 is not yet available. Shortly after the first filing version of the 2015 Intuit ProFile software is available in January, 2016, the updated 2015 version of this problem will be available on the textbook web site at:

[www.pearsoncanada.ca/byrdchen/ctp2016](http://www.pearsoncanada.ca/byrdchen/ctp2016)

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For more information on how to use the ProFile tax program, please refer to the sample tax returns in the Study Guide.

### **Solution For Tax Software Assignment Problem 11-3 Contains Chapter 8 Interim Solution**

Tax Software Assignment Problem Eleven-3 is a very comprehensive problem. The material related to each chapter is clearly identified to help users determine where the relevant coverage is in the textbook. For instructors wishing to assign a tax software problem after Chapter 4, but before Chapter 11, an interim solution is available for the material up to and including Chapter 8 (capital gains).

#### **Notes To Tax Return**

Either spouse can claim the charitable donations made by the couple, including donations shown on Mary's T4. As we are assuming Seymour has no income, they have been claimed by Mary.

The "Summary" form is available in the Form Explorer and shows the balance (refund). In addition, the data monitor that is at the bottom of the screen also shows the balance (refund) for each province. The comparison of the total federal and provincial Tax Payable or refund, in the order that the provinces are listed in the ProFile drop down menu (west to east, excluding Quebec) is in the following table. The corresponding figures for the previous year are also given.

One major difference is the availability of the Family Tax Cut in 2014. Mary claims the maximum Family Tax Cut of \$2,000 as you would expect.

Province	Balance Owing (Refund)	
	2014	2013
British Columbia	(\$7,818)	(\$5,763)
Alberta	(10,795)	( 8,602)
Saskatchewan	( 6,901)	( 4,681)
Manitoba	( 1,591)	617
Ontario	( 4,338)	( 2,138)
New Brunswick (Original Province)	( 1,933)	( 1,770)
Nova Scotia	( 733)	1,419
Prince Edward Island	( 634)	1,490
Newfoundland/Labrador	( 5,385)	( 3,183)
Yukon	( 8,761)	( 6,551)
Northwest Territories	( 9,684)	( 7,463)
Nunavut	(13,130)	(10,917)

## CHAPTER FIVE SOLUTIONS

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### Solution to Assignment Problem Five - 1

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#### Part A

As the manufacturing and processing equipment was purchased after March 18, 2007 and before January 1, 2016, it would be allocated to Class 29. CCA for this Class is determined on a 50 percent straight line basis. This results in a 25%/50%/25% straight line write-off after consideration of the half-year rule.

The maximum CCA for 2013, 2014 and 2015 would be calculated as follows:

Capital Cost Of M&P Assets	\$500,000
2013 CCA [(50%)(1/2)(\$500,000)]	( 125,000)
<hr/>	
UCC January 1, 2014	\$375,000
2014 CCA [(50%)(500,000 Original Cost)]	( 250,000)
<hr/>	
UCC January 1, 2015	\$125,000
2015 CCA (Balance In Class)	( 125,000)
<hr/>	
UCC January 1, 2016	Nil
<hr/>	

#### Part B

If the new building is placed in the existing Class 1 and is not put into a separate Class 1, the applicable CCA rate will be 4 percent.

If the building is put into a separate Class 1, the applicable CCA rates will be as follows:

##### Alternative 1 - 100 percent for manufacturing

Since the building will be used more than 90 percent for manufacturing, the CCA rate is 10 percent.

##### Alternative 2 - 60 percent for manufacturing and 40 percent for office space

Since the building will not be used more than 90 percent for manufacturing, but will be used more than 90 percent for non-residential purposes, the CCA rate is 6 percent.

##### Alternative 3 - 40 percent for manufacturing, 30 percent for office space and 30 percent for long-term residential rentals

Since the building will not be used more than 90 percent for non-residential purposes, the CCA rate is 4 percent. This is the same rate as would apply if the building was added to the existing Class 1.

## Solution to Assignment Problem Five - 2

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**Note To Instructor** Although the replacement property rules (covered in Chapter 8) might be considered relevant as a building was burned down and a new building was purchased, we have specified that a warehouse was disposed of, and an office building was purchased, to avoid that complication in this problem.

### Class 1

As it is a new building, is going to be used 100 percent for non-residential purposes, and it has been put in a separate Class, it is eligible for the enhanced CCA rate of 6 percent. Given this, the required information for this Class is as follows:

January 1, 2015 UCC	Nil
Additions (\$623,000 - \$145,000)	\$478,000
One-Half Net Additions	( 239,000)
Balance Subject To CCA	\$239,000
CCA [(6%)(239,000)]	( 14,340)
One-Half Net Additions	239,000
January 1, 2016 UCC	\$463,660

### Class 3

The required information for this Class is as follows:

January 1, 2015 UCC	\$798,000
Dispositions - Lesser Of:	
Capital Cost = \$150,000	
Proceeds Of Disposition = \$185,000	( 150,000)
Balance Subject To CCA	\$648,000
CCA [(5%)(648,000)]	( 32,400)
January 1, 2016 UCC	\$615,600

There would also be a taxable capital gain from the disposition of \$17,500 [(1/2)(185,000 - \$150,000)].

### Class 8

The required calculations for this class would be as follows:

January 1, 2015 UCC		\$346,000
Additions	\$105,000	
Dispositions - Lesser Of:		
• Capital Cost = \$83,000		
• Proceeds Of Disposition = \$75,000	( 75,000)	30,000
One-Half Net Additions [(1/2)(\$30,000)]		( 15,000)
Balance Subject To CCA		\$361,000
CCA [(20%)(361,000)]		( 72,200)
One-Half Net Additions		15,000
January 1, 2016 UCC Balance		\$303,800

**Class 10 - Vehicles**

The required information for this Class would be calculated as follows:

January 1, 2015 UCC		\$150,000
Additions [(3)(\$25,000)]	\$75,000	
Disposition of Truck - Lesser Of:		
• Capital Cost = \$42,000		
• Proceeds Of Disposition = \$18,000	( 18,000)	57,000
One-Half Net Additions [(1/2)(\$57,000)]		( 28,500)
Balance Subject To CCA		\$178,500
CCA [(30%)(178,500)]		( 53,550)
One-Half Net Additions		28,500
January 1, 2016 UCC Balance		\$153,450

**Class 10.1**

In the case of Class 10.1, recapture is not included in income and terminal losses cannot be deducted. However, in the year of disposition, one-half of the usual CCA can be deducted. This would be \$2,678 [(1/2)(30%)(17,850)]. The January 1, 2016 UCC balance would be nil.

**Class 13**

The 2013 improvements are being written off over 10 years, the original term of the lease (8 years), plus the first renewal of two years. As the Company takes maximum CCA each year, the CCA taken in 2013 and 2014 must equal 15 percent [(10%)(1/2) + 10%] of the cost of the improvements. Given this, the January 1, 2015 UCC must equal 85 percent of the cost of the improvements. This indicates that the cost must have been \$50,000 (\$42,500 ÷ 85%).

Given this, the required information for this Class would be as follows:

January 1, 2015 Balance		\$42,500
Additions		40,000
Balance Subject To CCA		\$82,500
CCA:		
• First Improvements (\$50,000 ÷ 10)	(\$5,000)	
• Current Improvements		
[(40,000 ÷ 8)(1/2)]	( 2,500)	( 7,500)
January 1, 2016 UCC Balance		\$75,000

**Class 29**

The required information for this Class would be calculated as follows:

January 1, 2015 Balance		\$63,000
Disposition - Lesser Of:		
• Capital Cost = \$252,000		
• Proceeds Of Disposition = \$51,000		( 51,000)
Balance Before Terminal Loss		\$12,000
Terminal Loss		( 12,000)
January 1, 2016 UCC Balance		Nil

After all of the assets in Class 29 have been retired there is still a \$12,000 UCC balance. This results in a terminal loss that will be deducted in full from the Net Income of Fortin Aluminum. The terminal loss will also be deducted from the UCC balance.

**Class 50**

The required information for this Class can be calculated as follows:

January 1, 2015 Balance	\$23,000
Additions	18,000
One-Half Net Additions [(1/2)(\$18,000)]	( 9,000)
<hr/>	
CCA Base	\$32,000
CCA [(55%)(\$32,000)]	( 17,600)
One-Half Net Additions	9,000
<hr/>	
January 1, 2016 UCC	\$23,400
<hr/>	

**Summary Of The Results (Not Required)**

The maximum CCA for the year ending December 31, 2015 and the January 1, 2016 UCC balances can be summarized as follows:

	Maximum CCA	UCC
Class 1	\$14,340	\$463,660
Class 3	32,400	615,600
Class 8	72,200	303,800
Class 10	53,550	153,450
Class 10.1	2,678	Nil
Class 13	7,500	75,000
Class 29	Nil	Nil
Class 50	17,600	23,400

In addition, the following income effects resulted from the information provided in the problem:

Taxable Capital Gain On Class 3 Building	\$17,500
Terminal Loss On Class 29 Assets	( 12,000)
<hr/>	
Total Addition	\$ 5,500
<hr/>	

## Solution to Assignment Problem Five - 3

**Note To Instructor** The textbook does not cover what specific types of assets would be allocated to Class 29, other than that they would be manufacturing and processing assets. As a result, the problem states that the kitchen equipment is allocated to Class 8 in order to resolve any uncertainty on this issue that might arise.

### 2012 Solution

The required calculations are as follows:

	Class 13	Class 8	Class 10
Opening Balance	Nil	Nil	Nil
Additions During Year	\$175,000	\$124,000	\$200,000
One-Half Net Additions	( 87,500)	( 62,000)	( 100,000)
CCA Base	\$ 87,500	\$ 62,000	\$100,000
Class 13 CCA [(\$87,500 ÷ 10)(122/365)]	( 2,925)		
Class 8 CCA [(20%)(62,000)(122/365)]		( 4,145)	
Class 10 CCA [(30%)(100,000)(122/365)]			( 10,027)
One-Half Net Additions	87,500	62,000	100,000
UCC - January 1, 2013	\$172,075	\$119,855	\$189,973

As the business was established on September 1, 2012, its operations were carried out for 122 days in 2012, and only a proportionate share of the annual CCA charge may be taken. We would call your attention to the fact that it is the length of the taxation year, not the period of ownership of the assets, that establishes the fraction of the year for which CCA is to be recorded.

### 2013 Solution

The required calculations are as follows:

	Class 13	Class 8	Class 10
Opening Balance	\$172,075	\$119,855	\$189,973
Additions [(5)(\$27,000)]	Nil	Nil	135,000
Dispositions - Lesser Of:			
- Capital Cost [(4)(\$25,000)] = \$100,000			( 81,000)
- Proceeds = \$81,000			( 27,000)
One-Half Net Additions	N/A	N/A	( 27,000)
CCA Base	\$172,075	\$119,855	\$216,973
Class 13 CCA (\$175,000 ÷ 10)	( 17,500)		
Class 8 CCA [(20%)(119,855)]		( 23,971)	
Class 10 CCA [(30%)(216,073)]			( 65,092)
One-Half Net Additions			27,000
UCC - January 1, 2014	\$154,575	\$ 95,884	\$178,881

**2014 Solution**

The required calculations are as follows:

	Class 13	Class 8	Class 10
Opening Balance	\$154,575	\$ 95,884	\$178,881
Additions	98,000	62,000	Nil
Dispositions For Class 8 - Lesser Of:			
- Capital Cost = \$5,000			
- Proceeds = Nil		Nil	
Dispositions For Class 10 - Lesser Of:			
- Capital Cost [(4)(\$25,000) + (5)(\$27,000)]			
= \$235,000			
- Proceeds = \$185,000	Nil	Nil	( 185,000)
One-Half Net Additions	( 49,000)	( 31,000)	N/A
CCA Base	\$203,575	\$126,884	N/A
Ending Negative Balance			(\$ 6,119)
Class 13 CCA -			
(\$175,000 ÷ 10)	( 17,500)		
[(98,000 - 49,000)* ÷ 8]	( 6,125)		
Class 8 CCA [(20%)(126,884)]		( 25,377)	
Class 10 Recapture			6,119
One-Half Net Additions	49,000	31,000	N/A
UCC - January 1, 2015	\$228,950	\$ 132,507	Nil

\* Class 13 effectively treats each leasehold improvement as a separate property. As a result, the half year rule is applied to the \$98,000 expenditure when calculating CCA for the year.

**2015 Solution**

With respect to the leasehold improvements, there will be a terminal loss of \$116,950 (\$228,950 - \$112,000). Similarly, there will be a terminal loss on the Class 8 assets of \$82,507 (\$132,507 - \$50,000).

As the business does not have a CEC balance, subtracting the payment for goodwill will create a negative balance of \$75,000. As no amounts of CEC have been deducted in the past, this entire amount will be multiplied by two-thirds, resulting in an income inclusion of \$50,000 [(2/3)(\$75,000)]. This is also equal to one-half of the proceeds received for the goodwill.

**Summary (Not Required)**

	Class 13	Class 8	Class 10
2012 CCA	\$ 2,925	\$ 4,145	\$10,027
2013 CCA	17,500	23,971	65,092
2014 CCA	29,750	25,377	
2014 Recapture			6,119
2015 Terminal Loss	116,950	82,507	N/A

In addition, there is a 2015 gain on the sale of goodwill of \$50,000.

## Solution to Assignment Problem Five - 4

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### Cumulative Eligible Capital

**Note To Instructors** We rounded to cents rather than dollars for CEC calculations only. The reason for this was to make the negative balance correctly reflect the net gain on the disposition.

Three-quarters of the costs of incorporation will be added to the CEC balance. It will be written off on a declining balance basis at a rate of 7 percent. CEC is not subject to the first-year rules. The sale of the customer lists would be treated as a CEC disposition. Given these facts, the required information is as follows:

	CEC Balance	CEC Deductions
Acquisitions [(3/4)(\$25,000)]	\$18,750.00	
2013 CEC Amount [(7%)(18,750)]	( 1,312.50)	\$1,312.50
CEC - January 1, 2014	\$17,437.50	
2014 CEC Amount [(7%)(17,437.50)]	( 1,220.63)	1,220.63
CEC - January 1, 2015	\$16,216.87	
Dispositions [(3/4)(\$50,000)]	( 37,500.00)	
Balances After Sale	(\$21,283.13)	\$2,533.13

To the extent that CEC has been taken in previous years, the full amount deducted must be included in income. That would be \$2,533.13. The remaining negative balance of \$18,750 (\$21,283.13 - \$2,533.13) will be multiplied by two-thirds to arrive at an income inclusion of \$12,500. Note that this is equal to one-half of the net gain on acquisitions and dispositions [(1/2)(\$50,000 - \$25,000)].

The total addition to the Corporation's income in 2015 would be \$15,033.13 [(\$2,533.13 + \$12,500)].

### Class 13

The leasehold improvements will be written off on a straight-line basis over the original term, plus the term of the first renewal, a total of 10 years. Class 13 is subject to the first-year rules. Given these facts, the required information is as follows:

Acquisitions	\$150,000
2013 CCA [(1/2)(\$150,000 ÷ 10)]	( 7,500)
UCC - January 1, 2014	\$142,500
2014 CCA (\$150,000 ÷ 10)	( 15,000)
UCC - January 1, 2015	\$127,500
Disposition - Lesser Of:	
Capital Cost = \$150,000	
POD = \$75,000	( 75,000)
Terminal Loss	\$ 52,500

The full amount of the \$52,500 terminal loss would be deducted in the determination of 2015 corporate Net Income For Tax Purposes.

**Class 14**

The cost of the franchise will be written off on a straight-line basis over its legal life. Class 14 is not subject to the first-year rules. However, CCA must be calculated on a pro rata, per diem basis. As the agreement was signed on January 1, 2013, no per diem adjustment is required. Given these facts, the required information is as follows:

Acquisitions	\$220,000
2013 CCA $[(\$220,000 \div 5)]$	( 44,000)
<hr/>	
UCC - January 1, 2014	\$176,000
2014 CCA $[(\$220,000 \div 5)]$	( 44,000)
<hr/>	
UCC - January 1, 2015	\$132,000
Disposition - Lesser Of:	
Capital Cost = \$220,000	
POD = \$200,000	( 200,000)
<hr/>	
Recapture Of CCA	(\$ 68,000)
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The full amount of the \$68,000 of recapture would be included in the corporation's 2015 Net Income For Tax Purposes.

**Class 29**

The manufacturing equipment will be written off on a straight-line basis over two years. Class 29 is subject to the first-year rules. Given these facts, the required information is as follows:

Acquisitions	\$262,000
2013 CCA $[(1/2)(50%)(\$262,000)]$	( 65,500)
<hr/>	
UCC - January 1, 2014	\$196,500
2014 CCA $[(50%)(\$262,000)]$	( 131,000)
<hr/>	
UCC - January 1, 2015	\$ 65,500
Disposition - Lesser Of:	
Capital Cost = \$262,000	
POD = \$186,000	( 186,000)
<hr/>	
Recapture Of CCA	(\$120,500)
<hr/>	

The full amount of the \$120,500 of recapture would be included in the corporation's 2015 Net Income For Tax Purposes.

**Class 8**

The furniture and fixtures will be written off on a declining balance basis at a rate of 20 percent. Class 8 is subject to the first-year rules. Given these facts, the required information is as follows:

Acquisitions	\$87,000
2013 CCA $[(1/2)(20%)(\$87,000)]$	( 8,700)
<hr/>	
UCC - January 1, 2014	\$78,300
2014 CCA $[(20%)(\$78,300)]$	( 15,660)
<hr/>	
UCC - January 1, 2015	\$62,640
Disposition - Lesser Of:	
Capital Cost = \$87,000	
POD = \$23,000	( 23,000)
<hr/>	
Terminal Loss	\$39,640
<hr/>	

The full amount of the \$39,640 terminal loss would be deducted in the determination of 2015 corporate Net Income For Tax Purposes.

**Class 12**

Class 12 is subject to a 100 percent write off in the year of acquisition. Small tools with a cost of less than \$500 each are not subject to the first-year rules. Given these facts, the required information is as follows:

Acquisitions	\$12,000
2013 CCA [(100%)(\\$12,000)]	( 12,000)
<hr/>	
UCC - January 1, 2014	Nil
2014 CCA	Nil
<hr/>	
UCC - January 1, 2015	Nil
Disposition - Lesser Of:	
Capital Cost = \$12,000	
POD = \$5,000	( 5,000)
<hr/>	
Recapture Of CCA	(\$5,000)
<hr/>	

The full amount of the \$5,000 of recapture would be included in the corporation's 2015 Net Income For Tax Purposes.

**Class 10**

The delivery vans will be written off on a declining balance basis at a rate of 30 percent. Class 10 is subject to the first-year rules. Given these facts, the required information is as follows:

Acquisitions	\$160,000
2013 CCA [(1/2)(30%)(\\$160,000)]	( 24,000)
<hr/>	
UCC - January 1, 2014	\$136,000
2014 CCA [(30%)(\\$136,000)]	( 40,800)
<hr/>	
UCC - January 1, 2015	\$ 95,200
Disposition - Lesser Of:	
Capital Cost = \$160,000	
POD = \$85,000	( 85,000)
<hr/>	
Terminal Loss	\$ 10,200
<hr/>	

The full amount of the \$10,200 terminal loss would be deducted in the determination of 2015 corporate Net Income For Tax Purposes.

**Class 10.1**

The BMW will be put into a separate Class 10.1, with the 2013 addition being limited to \$30,000. It will be subject to a 30 percent declining balance write off. Class 10.1 is subject to the first-year rules. Given these facts, the required information is as follows:

Acquisitions	\$30,000
2013 CCA [(1/2)(30%)(\\$30,000)]	( 4,500)
<hr/>	
UCC - January 1, 2014	\$25,500
2014 CCA [(30%)(\\$25,500)]	( 7,650)
<hr/>	
UCC - January 1, 2015	\$17,850
<hr/>	
2015 CCA [(1/2)(30%)(\\$17,850)]	\$2,678
<hr/>	

Neither recapture of CCA nor terminal losses are recognized for Class 10.1. However, the taxpayer is permitted to take one-half year's CCA in the year of disposition.

## Solution to Assignment Problem Five - 5

The maximum CCA for the 3 years would be calculated as in the following schedules:

<b>2013</b>	<b>Class 1</b>	<b>Class 10</b>	<b>Class 8</b>
Opening Balance	Nil	Nil	Nil
Additions			
Class 1 (\$326,000 - \$53,000)	\$273,000		
Class 10 [(12)(\$23,000)]		\$276,000	
Class 8			\$85,000
One-Half Net Addition	( 136,500)	( 138,000)	( 42,500)
CCA Base	\$136,500	\$138,000	\$42,500
Maximum CCA			
Class 1 [(6%)(\$136,500)(245 ÷ 365)]*	( 5,497)		
Class 10 [(30%)(\$138,000)(245 ÷ 365)]		( 27,789)	
Class 8 [(20%)(\$42,500)(245 ÷ 365)]			( 5,705)
One-Half Net Additions	136,500	138,000	42,500
January 1, 2014 UCC	\$267,503	\$248,211	\$79,295

\*As the Class 1 building is being used 100 percent for non-residential purposes and is allocated to a separate Class 1, it would qualify for the 6 percent CCA rate.

The total maximum CCA for 2013 would be \$38,991 (\$5,497 + \$27,789 + \$5,705).

<b>2014</b>	<b>Class 1</b>	<b>Class 10</b>	<b>Class 8</b>	<b>Class 10.1</b>
Beginning UCC	\$267,503	\$248,211	\$79,295	Nil
Additions				
Class 1	Nil			
Class 10 [(5)(\$27,000)]		135,000		
Class 8			Nil	
Class 10.1*				\$30,000
Class 10 Disposition - Lesser Of:				
Capital Cost = \$115,000				
Proceeds = \$80,000	Nil	( 80,000)	Nil	
One-Half Net Additions	Nil	( 27,500)	Nil	( 15,000)
CCA Base	\$267,503	\$275,711	\$79,295	\$15,000
Maximum CCA				
Class 1 [(6%)(\$267,503)]	( 16,050)			
Class 10 [(30%)(\$275,711)]		( 82,713)		
Class 8 [(20%)(\$79,295)]			( 15,859)	
Class 10.1 [(30%)(\$15,000)]				( 4,500)
One-Half Net Additions		27,500	Nil	15,000
January 1, 2015 UCC	\$251,453	\$220,498	\$63,436	\$25,500

\*The CCA base for the luxury car is limited to \$30,000.

The total maximum CCA for 2014 would be \$119,122 (\$16,050 + \$82,713 + \$15,859 + \$4,500).

2015	Class 1	Class 10	Class 8
Beginning UCC	\$251,453	\$220,498	\$63,436
Additions	Nil	Nil	Nil
Proceeds Of Disposition - Lesser Of:			
\$289,000 Vs. \$273,000	( 273,000)		
\$296,000 Vs. \$135,500		( 135,500)	
\$85,000 Vs. \$12,300			( 12,300)
Balance With No Remaining Assets	( \$21,547)	\$ 84,998	\$51,136
Class 1 Recapture	21,547		
Terminal Losses		( 84,998)	( 51,136)
January 1, 2016 UCC	Nil	Nil	Nil

With respect to the Class 10.1 vehicle, the *Income Tax Regulations* permit taking one-half of the regular CCA in the year of disposition. Since the final year is not a short fiscal period, this amount would be \$3,825 [(1/2)(30%)(25,500)].

No recapture or terminal loss can be recognized with respect to Class 10.1. However, the balance would be eliminated, leaving a January 1, 2016 UCC of nil.

The only CCA for 2015 would be the Class 10.1 CCA of \$3,825 as Classes 1, 8 and 10 had no CCA for the year. There would be recapture of \$21,547 for Class 1, a terminal loss of \$84,998 for Class 10 and a \$51,136 terminal loss for Class 8.

There would also be a taxable capital on the building of \$8,000 [(1/2)(289,000 - 273,000)].

## Solution to Assignment Problem Five - 6

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### Part A

The required calculation of the maximum CCA and CEC is as follows:

Class 8 [(20%)(\\$163,000)]	\$ 32,600
Class 10 (Note 1)	37,050
Class 12 (Note 2)	42,000
Class 13 (Note 3)	24,000
CEC [(7%)(\\$153,000)]	10,710
Maximum Total	\$146,360

**Note 1** The Class 10 CCA would be calculated as follows:

Opening Balance	\$112,000
Additions	52,000
Proceeds Of Disposition (Less Than Cost)	( 29,000)
One-Half Net Additions [(1/2)(\\$52,000 - \$29,000)]	( 11,500)
CCA Base	\$123,500
CCA Rate	30%
Maximum CCA	\$ 37,050

**Note 2** The rate for Class 12 is 100 percent. However, some additions to this Class are subject to the half-year rules. The presence of an opening balance of \$42,000 and the statement that maximum CCA has always been taken, indicates that there must have been \$84,000 of costs in 2014 that were subject to this rule. Given this, the entire balance can be deducted in 2015.

**Note 3** The \$204,000 balance in Class 13 is equal to 85 percent of \$240,000. This means that during the two years 2013 and 2014, 15 percent of their cost was deducted as CCA. As the half-year rules are applicable to this Class, this represents a half year for 2013 and a full year for 2014. Since Class 13 is a straight-line Class, this indicates that the CCA rate is 10 percent ( $15\% \div 1.5$ ). Based on this analysis, maximum CCA for 2015 would be \$24,000 [(10%)(\\$240,000)].

### Part B

Since the Company only has Net and Taxable Income before CCA and CEC of \$43,000 and the problem states that loss carry overs should not be considered, maximum CCA and CEC would not be deducted. Only \$43,000 in CCA and CEC should be taken in order to reduce the Taxable Income to nil.

As to which balances of CCA or CEC should be reduced, the usual procedure is to deduct the required amount from the balances with the lowest rates. By leaving the balances with higher rates untouched, larger amounts of CCA and CEC can be deducted in later periods as required.

Taking this approach, the recommended CCA and CEC deductions would be as follows:

CEC (Maximum Available)	\$10,710
Class 13 (Maximum Available)	24,000
Class 8 (\$43,000 - \$10,710 - \$24,000)	8,290
Total CCA	\$43,000

The deduction of this amount of CCA and CEC would serve to reduce Taxable Income to nil.

## Solution to Assignment Problem Five - 7

### Part A

The maximum CEC deductions for the 3 years would be calculated as follows:

No Election	CEC Balance	CEC Deductions
Balance January 1, 2013	\$ Nil	
Acquisition [(3/4)(\$150,000 + \$400,000)]	412,500	
Balance Before CEC Deduction	\$412,500	
2013 CEC Amount [(7%)(412,500)]	( 28,875)	\$28,875
Balance January 1, 2014	\$383,625	
Disposition [(3/4)(\$175,000)]	( 131,250)	
Balance Before CEC Deduction	\$252,375	
2014 CEC Amount [(7%)(252,375)]	( 17,666)	17,666
Balance January 1, 2015	\$234,709	
Disposition [(3/4)(\$475,000)]	( 356,250)	
Balance After Sale	(\$121,541)	\$46,541

As shown in the preceding schedule, the maximum CEC deductions are \$28,875 in 2013, \$17,666 in 2014, and nil in 2015.

### Part B

For 2014, there is positive balance in the CEC after the disposition. This means that no amount will be included in income as a result of this disposition.

With respect to the 2015 disposition, there is a negative balance of \$121,541. Of this total, \$46,541 represents the CEC deductions from previous years. This amount will be included in 2015 income in full.

The remaining \$75,000 (\$121,541 - \$46,541) represents three-quarters of \$100,000. This \$100,000 is the excess of the proceeds of the disposals over the cost of additions to the account (\$175,000 + \$475,000 - \$150,000 - \$400,000). The \$75,000 will be multiplied by two-thirds to arrive at an income inclusion of \$50,000.

The total business income inclusion for 2015 will be \$96,541 (\$46,541 + \$50,000).

### Part C

The ITA 14(1.01) election cannot be used for dispositions of goodwill. However, because the disposition proceeds exceeded the cost, the election can be used for the 2014 disposition. Its use will result in the following income inclusion in that year:

Proceeds Of Disposition	\$175,000
Cost Of Franchise	( 150,000)
Capital Gain	\$ 25,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 12,500

The use of the election would also alter the CEC schedule as follows:

With Election	CEC Balance	CEC Deductions
Balance January 1, 2013	\$ Nil	
Acquisition [(3/4)(\$150,000 + \$400,000)]	412,500	
Balance Before CEC Deduction	\$412,500	
2013 CEC Amount [(7%)(412,500)]	( 28,875)	\$28,875
Balance January 1, 2014 <b>(No Change From Part A)</b>	<b>\$383,625</b>	
Disposition [(3/4)(\$150,000)] (Election Used)	( 112,500)	
Balance Before CEC Deduction	\$271,125	
2014 CEC Amount [(7%)(271,125)]	( 18,979)	18,979
Balance January 1, 2015	\$252,146	
Disposition [(3/4)(\$475,000)] (Election Can't Be Used)	( 356,250)	
Balance After Sale	(\$104,104)	\$47,854

To the extent of the \$47,854 CEC deducted, this full amount would be included in 2015 income. The balance of \$56,250 (\$104,104 - \$47,854) would be multiplied by two-thirds, resulting in an additional income inclusion of \$37,500. Note that this is equal to one-half of the \$75,000 (\$475,000 - \$400,000) gain on the sale of goodwill.

The total 2015 business income inclusion would be \$85,354 (\$47,854 + \$37,500).

#### **Part D**

The required comparison would be as follows:

Results Without Election		
2015 Income Inclusion		\$96,541
2013 And 2014 CEC Amounts Deducted		( 46,541)
Net Income Inclusion		\$ 50,000
Results With Election		
2014 Taxable Capital Gain		\$12,500
2015 Income Inclusion		85,354
2013 And 2014 CEC Amounts Deducted		( 47,854)
Net Income Inclusion		\$50,000

The total of the CEC deductions and income inclusions is equal to \$50,000 whether or not the election is used. The probable reason for making this election would be that Andiron has unused allowable capital losses from the current or previous years. By making this election the Company has created a taxable capital gain which will allow for the use of up to \$12,500 in allowable capital losses. If this is not the case, using the election has added \$12,500 to income a year earlier than if the election was not used.

## Solution to Assignment Problem Five - 8

### **New Separate Class 1**

Since the building is new, used 100 percent for non-residential purposes and allocated to a separate Class 1, it qualifies for an enhanced CCA rate. As it is not being used more than 90 percent for manufacturing and processing, the enhanced rate is 6 percent. Using this rate, the CCA on the new building would be as follows:

Opening UCC Balance	Nil
Additions (\$950,000 - \$150,000)	\$800,000
One-Half Net Additions [(1/2)(\$800,000)]	( 400,000)
CCA Base	\$400,000
Rate	6%
Maximum CCA	\$ 24,000

### **Old Class 1**

The required calculations for the old Class 1 are as follows:

Opening UCC Balance	\$606,929
Disposition - Lesser Of:	
Proceeds (\$800,000 - \$200,000) = \$600,000	
Capital Cost (\$900,000 - \$200,000) = \$700,000	( 600,000)
Terminal Loss	\$ 6,929

As this building was the last asset in the old Class 1, and the new building is being allocated to a new and separate Class 1, the post-disposition balance of \$6,929 is a fully deductible terminal loss.

### **Class 8**

The required calculation here would be as follows:

Opening UCC Balance	\$347,291
Additions	111,256
Disposals - Lesser Of:	
Capital Cost = \$58,425	
Proceeds = \$20,000	( 20,000)
One-Half Net Additions [(1/2)(\$111,256 - \$20,000)]	( 45,628)
CCA Base	\$392,919
Rate	20%
Maximum CCA	\$ 78,584

### **Class 10**

The required calculations here would be as follows:

Opening UCC Balance	\$183,452
Disposals - Lesser Of:	
Capital Cost = \$240,000	
Proceeds = \$150,000	( 150,000)
Terminal Loss	\$ 33,452

As there are no assets left in Class 10, the \$33,452 balance is a fully deductible terminal loss.

**Class 10.1**

The BMW would be allocated to a separate Class 10.1. The amount would be limited to \$30,000, resulting in maximum CCA of \$4,500  $[(1/2)(30\%)(\$30,000)]$ . The kilometers driven for personal purposes would affect the taxable benefit, but does not affect the CCA.

**Class 13**

Class 13 is a straight-line class. The original term of the lease, plus the first renewal, requires a straight-line write off over 8 years. The improvements in fiscal 2015 will be written off over 6 years. Given this, the maximum CCA would be calculated as follows:

Original Improvements $(\$216,000 \div 8)$	\$27,000
2015 Improvements $[(1/2)(\$42,000 \div 6)]$	3,500
<u>Maximum CCA</u>	<u>\$30,500</u>

**CEC**

The maximum deduction from the cumulative eligible capital account is calculated as follows:

May 1, 2013 Addition $[(3/4)(\$124,000)]$	\$ 93,000
CEC Amount At 7 Percent	( 6,510)
<u>June 30, 2013 Balance</u>	<u>\$ 86,490</u>
CEC Amount At 7 Percent	( 6,054)
<u>June 30, 2014 Balance</u>	<u>\$ 80,436</u>
Disposal $[(3/4)(\$136,000)]$	( 102,000)
<u>Balance After Disposal</u>	<u>(\$ 21,564)</u>

To the extent that CEC has been deducted in the past, this amount will be added to income. This results in an inclusion of \$12,564  $(\$6,510 + \$6,054)$ . The remaining portion of the negative balance is \$9,000. This amount will be multiplied by two-thirds to arrive at \$6,000.

This amount will also be included in business income, resulting in a total addition of \$18,564  $(\$12,564 + \$6,000)$ .

**Summary (Not Required)**

The total maximum CCA and CEC write-off is calculated as follows:

New Class 1	\$ 24,000
Old Class 1	Nil
Class 8	78,584
Class 10	Nil
Class 10.1	4,500
Class 13	30,500
CEC Amount	Nil
<u>Total CCA and CEC</u>	<u>\$137,584</u>

In addition, there is:

- a Class 1 terminal loss of \$6,929,
- a Class 10 terminal loss of \$33,452, and
- a CEC income inclusion of \$18,564.

## CHAPTER SIX SOLUTIONS

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### Solution to Assignment Problem Six - 1

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The results for the 2 years would be as follows:

	2015	2016
Cash Sales (\$259,000 - \$88,000)	\$171,000	
Cash Sales (\$360,000 - \$72,000)		\$288,000
Sales On Account	88,000	72,000
Reserve For Doubtful Debts:		
Add Prior Year Reserve	Nil	7,000
Deduct Current Year Reserve	( 7,000)	( 9,500)
Deduct Actual Write-Offs	Nil	( 6,500)
Advances From Customers	27,000	21,000
Reserve For Undelivered Merchandise:		
Add Prior Year Reserve	Nil	27,000
Deduct Current Year Reserve	( 27,000)	( 21,000)
Gross Profit On Sale Of Unused Materials	15,000	Nil
Reserve For Unpaid Amounts:		
Add Prior Year Reserve		9,677
Deduct Current Year Reserve*		
{[\$15,000][(\$62,000 - \$22,000) ÷ \$62,000]}	( 9,677)	
{[\$15,000][(\$62,000 - \$42,000) ÷ \$62,000]}		( 4,839)
<b>Net Effect</b>	<b>\$257,323</b>	<b>\$382,838</b>

\*As some of the proceeds on the sale of unused materials are not due until two years after the date of the sale, a reserve for unpaid amounts can be deducted. The three year time limit is not relevant as the full balance is paid off prior to the end of that period.

## Solution to Assignment Problem Six - 2

### Part A

**Ford Focus** The tax consequences resulting from the sale of the Ford Focus can be calculated as follows:

January 1, 2015 UCC	\$20,060
Disposition - Lesser Of:	
Capital Cost = \$23,600	
Proceeds Of Disposition = \$18,200	( 18,200)
<hr/>	
Ending Balance With No Remaining Assets In Class	\$ 1,860
Terminal Loss	( 1,860)
<hr/>	
UCC - December 31, 2015	Nil
<hr/>	

Because of its price, the new Mercedes will have to be allocated to a separate Class 10.1. This means that the Ford Focus was the last asset in Class 10. Given this, the balance of \$1,860 will be deducted from income as a terminal loss.

As no balance remains in this Class, there will be no Class 10 CCA for 2015.

**Mercedes E-Class Sedan** The maximum CCA deduction on the Mercedes would be calculated as follows:

Capital Cost (Limited To \$30,000)	\$30,000
One-Half Net Additions	( 15,000)
<hr/>	
Balance For CCA Purposes	\$15,000
Rate	30%
<hr/>	
Maximum CCA	\$ 4,500
<hr/>	

The net effect on income due to the two automobiles would be as follows:

Terminal Loss	(\$ 1,860)
CCA	( 4,500)
Operating Costs (Fully Deductible)	( 17,460)
<hr/>	
Total Deductible Costs	(\$23,820)
<hr/>	

### Part B

Because the Ford Focus was used primarily (more than 50 percent) for employment purposes, it is eligible for the reduced standby charge and the alternative operating cost benefit calculation. The minimum benefit on this vehicle would be calculated as follows:

Standby Charge:	
$[(2\%)(\$23,600)(4)(6,668 \div 6,668^*)]$	\$1,888
Operating Cost Benefit - Lesser Of:	
• $[(\$1,888)(1/2)] = \$944$	
• $[(13,000)(\$0.27)] = \$3,510$	944
<hr/>	
Ford Focus - Minimum Total Benefit	\$2,832
<hr/>	

\* $[(4)(1,667)]$  Also note that, as the personal use was greater than 1,667 kilometers per month, the numerator is equal to the denominator.

Less than one-half of the Mercedes' mileage was for employment related activities. Given this, there is no reduction of the standby charge and no alternative calculation of the operating cost benefit available. The minimum total benefit is calculated as follows:

Standby Charge [(2%)(\\$52,000)(8)]	\$ 8,320
Operating Cost Benefit [(23,000)(\\$0.27)]	6,210
Mercedes Sedan - Minimum Total Benefit	\$14,530

The total benefit on the two vehicles would be calculated as follows:

Ford Focus	\$ 2,832
Mercedes Sedan	14,530
Total Taxable Benefit	\$17,362

## Solution to Assignment Problem Six - 3

### Analysis

The choice between the two alternatives will be based on the comparative tax flows of the two alternatives. The relevant calculations are provided in the sections which follow.

### Employer Provides Automobile

If Jordan elects to have the employer provide the BMW, he will have a taxable benefit in each year. Since his employment related mileage is greater than 50 percent, he is eligible for the reduced standby charge and the alternative operating cost benefit calculation. The after tax consequence of this choice would be as follows:

Standby Charge (Reduced)	
[(2%)(12)(\$125,000)(18,000 ÷ 20,004*)]	\$26,995
Operating Cost Benefit - Lesser Of:	
• [(1/2)(\$26,995)] = \$13,498	
• [(\$0.27)(18,000)] = \$4,860	4,860
Total Automobile Benefit	\$31,855
Marginal Tax Rate	45%
Annual Increase In Tax	\$14,335

\*[(12)(\$1,667)]

### Jordan Buys the Automobile

The pre-tax cash inflows (outflows) associated with this alternative are as follows:

	2015	2016	2017
Loan Proceeds	\$125,000	N/A	N/A
Automobile Purchase	( 125,000)	N/A	N/A
Allowance Received [(12)(\$2,000)]	24,000	\$24,000	\$ 24,000
Loan Repayment	N/A	N/A	( 125,000)
Proceeds From Sale Of Car	N/A	N/A	52,000
Operating Costs [(\$0.32)(65,000)]	( 20,800)	( 20,800)	( 20,800)
Pre-Tax Cash Inflows (Outflows)	\$ 3,200	\$ 3,200	(\$ 69,800)

The tax savings (costs) associated with this alternative are as follows:

	2015	2016	2017
Operating Costs [(\$0.32)(65,000)]	(\$20,800)	(\$20,800)	(\$20,800)
CCA (Note 1)			
[(1/2)(30%)(30,000)]	( 4,500)		
[(30%)(25,500)]		( 7,650)	
[(1/2)(30%)(17,850)]			( 2,678)
Automobile Costs Before Imputed Interest	(\$25,300)	(\$28,450)	(\$23,478)
Employment Usage (47,000 ÷ 65,000)	72.3%	72.3%	72.3%
Deductible Amount	(\$18,292)	(\$20,569)	(\$16,975)
Allowance	24,000	24,000	24,000
Net Taxable Benefit On Loan (Note 2)	692	692	692
Inclusion In Taxable Income	\$ 6,400	\$ 4,123	\$ 7,717
Marginal Tax Rate	45%	45%	45%
Increase In Tax	\$ 2,880	\$ 1,855	\$ 3,473

**Note 1** As a Class 10.1 asset is involved, the CCA base is limited to \$30,000. When the asset is sold, no recapture or terminal loss can be recognized on Class 10.1. However, one-half year CCA can be deducted in the year of disposal.

**Note 2** There will be a taxable benefit on the loan of \$2,500 in interest per year [(2%)(\\$125,000)]. However, ITA 80.5 deems such interest to be interest paid. As it is less than the limit of \$10 of car loan interest per day, this would provide an interest deduction of \$1,808 [(\$2,500)(47,000 ÷ 65,000)], based on the portion of the vehicle mileage that is used for employment related purposes. As a result, the net benefit would be \$692 (\$2,500 - \$1,808).

The net after tax cash outflow would be calculated as follows:

	2015	2016	2017
Pre-Tax Cash Inflow (Outflow)	\$3,200	\$3,200	(\$69,800)
Tax Inflow (Outflow)	( 2,880)	( 1,855)	( 3,473)
Net Cash Inflow (Outflow)	\$ 320	\$ 1,345	(\$66,327)

### **Best Alternative**

A comparison of the two alternatives is as follows:

Net Cash Inflows (Outflows)	2015	2016	2017	Total
Employer Provided	(\$14,335)	(\$14,335)	(\$14,335)	(\$43,005)
Employee Purchase	320	1,345	( 66,327)	( 64,662)

Without consideration of the time value of money, the employer provided alternative is clearly preferable. The total cash outflow under this approach is \$43,005 as compared to \$64,662 under the employee purchase alternative.

### **Other Considerations**

The preceding calculations could be quite different if any of the required estimates prove not to be accurate, such as if the actual number of kilometers driven, or personal kilometers driven was to be different from the estimated, or if the resale value was not actually \$52,000. However, given the much lower cash outflow under the employer provided alternative, it is unlikely that the conclusion would change.

## Solution to Assignment Problem Six - 4

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### **Market Determination - Two Possible Values**

For tax purposes, the business can measure market using either replacement cost or net realizable value. These values would be as follows:

Replacement Cost [(\$16.75)(5,000)]	\$83,750
Net Realizable Value [(\$18.30)(5,000)]	\$91,500

While it is not an acceptable practice under GAAP, the CRA will accept the use of market values, without regard to their relationship to cost.

### **Cost Determination**

In the determination of cost, taxpayers are permitted to use specific identification (this would not appear to be practical here), a First In, First Out (FIFO) assumption, or Average Cost.

Using the First In, First Out method, the appropriate value for the ending inventory would be determined as follows:

1,500 Units At \$16.50	\$24,750
3,200 Units At \$21.42	68,544
300 Units At \$20.25	6,075
5,000 Units At FIFO Cost	\$99,369

Based on average cost, the ending inventory value would be calculated as follows:

Number Of Units	5,000
Average Cost [(\$297,644 ÷ 15,300)]	19.45
5,000 Units At Average Cost	\$97,250

### **Lower Of Cost And Market - Four Possible Values**

For tax purposes, the possible values here would be as follows:

Lower Of Replacement Cost And FIFO Cost	\$83,750
Lower Of Replacement Cost And Average Cost	83,750
Lower Of Net Realizable Value And FIFO Cost	91,500
Lower Of Net Realizable Value And Average Cost	91,500

For accounting purposes, only the last two values would be acceptable.

## Solution to Assignment Problem Six - 5

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The required calculations would be as follows:

Net Business Income For Tax Purposes	\$401,300
Item 1 - Maximum CCA (Note 1)	42,100
Item 1 - GAAP Amortization (Note 1)	( 36,400)
Item 2 - Landscaping Costs (Note 2)	12,000
Item 3 - Web Site Maintenance (Note 3)	Nil
Item 4 - Class 8 Sale (Note 4)	1,600
Item 5 - U.S. Advertising (Note 5)	( 5,500)
Item 6 - Business Meals And Entertainment (Note 6)	( 6,000)
Item 7 - Theft (Note 7)	Nil
Item 8 - Class 10 Sale (Note 8)	4,159
Item 8 - Class 10 Sale (Note 8)	( 8,552)
Item 9 - Donations (Note 9)	( 4,200)
Item 10 - Soccer Uniforms (Note 10)	Nil
Item 11 - Ending Inventories (Note 11)	( 5,000)
<b>GAAP Based Net Income</b>	<b>\$395,507</b>

**Note 1** The net adjustment is \$5,700 added back.

**Note 2** While landscaping costs can be deducted for tax purposes, if they have a life that extends beyond the current year, they must be treated as an asset under GAAP.

**Note 3** It would appear that the costs of these services is reasonable. Given this, they can be deducted under both tax procedures and GAAP. No adjustment is required in determining GAAP based net income.

**Note 4** For tax purposes, the \$14,200 proceeds of disposition would be subtracted from Class 8. As there are still assets in the Class, as well as a positive balance in the Class at the end of the year, there are no tax consequences resulting from the disposition. However, under GAAP, a gain of \$1,600 (\$14,200 - \$12,600) would have been recognized.

**Note 5** While these costs could not be deducted for tax purposes, they would be deducted under GAAP.

**Note 6** The \$6,000 that was deducted for tax purposes would be one-half of the total of \$12,000. Under GAAP, the remaining \$6,000 can also be deducted.

**Note 7** The stolen \$4,300 can be deducted under both tax procedures and GAAP. No adjustment would be required in determining GAAP based net income.

**Note 8** When the \$15,000 proceeds of disposition is subtracted from Class 10 a balance of \$4,159 (\$19,159 - \$15,000) remains in the Class. As there are no assets left in the Class, the tax figure was reduced by a terminal loss of \$4,159. This must be added back. In contrast, under GAAP, the loss was \$8,552 (\$23,552 - \$15,000). This must be deducted in place of the tax loss of \$4,159.

**Note 9** While charitable contributions cannot be deducted in determining net business income for tax purposes, they can be deducted under GAAP.

**Note 10** The cost of the soccer uniforms would be a legitimate deduction for both tax and GAAP purposes. No adjustment is required in determining GAAP based net income.

**Note 11** While market is an acceptable basis for inventory valuation using tax procedures, GAAP requires the use of lower-of-cost-or-market. Using this figure would reduce ending inventory values. This would increase GAAP Based cost of sales and decrease GAAP Based Net Income by \$5,000 (\$123,000 - \$118,000).

## Solution to Assignment Problem Six - 6

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### Part A

As covered in this Chapter 6, ITA 12(1)(l) requires inclusion of business income from a partnership. As explained in more detail in Chapter 18, Partnerships, each partner's share of partnership profits is considered personal income of each partner. The profit is calculated as though the partnership was an individual resident of Canada. Once determined, it is allocated as per the partnership agreement, with the allocated amount being included in the individual tax returns of each partner.

### Part B

The basic rules of ITA 249.1(1) require that, in general, a partnership with members who are individuals use a December 31 fiscal year end. While ITA 249.1(4) allows a partnership to elect a fiscal year end other than December 31, this election requires complex adjustments for Additional Business Income that may or may not be worthwhile.

### Part C

This question requires an analysis of whether the arrangement with the outside architects is one of employment. This material is discussed in Chapter 3 which covers employment income. Detailed guidance can be found in the CRA Guide titled "Employee Or Self-Employed?" (RC4110).

If the outside architects are considered employees, source deductions will be required. In making this decision, the overriding consideration is the intent of the involved parties. Factors that can be considered in determining this intent include the following:

**Control** It does not appear that the partnership will exercise a significant amount of control over the outside architects on how and when the work will be done. The outside architects would be free to accept or reject work from the partnership and work for others.

**Ownership Of Tools And Equipment** Depending on the nature of the work done, the projects would likely not require much in the way of tools or equipment. Any laptop, computer or drafting table used in doing the work would undoubtedly be owned by the outside architects. Although not stated in the problem, it does not appear that the outside architect would be working in space provided by Richmond Consultants.

**Ability To Subcontract Or Hire Assistants** It is not clear whether the outside architects would have the right to subcontract or hire assistants. Determining this could be important to the analysis.

**Financial Risk** Since the work is done for a set fee and related expenses are reimbursed, there is no financial risk for the outside architects.

**Responsibility For Investment And Management** It would appear that the outside architects are responsible for any management of the projects that is required.

**Opportunity For Profit** Since the work is done for a set fee, the outside architect cannot increase the proceeds and hence the profit from a project. Since expenses are reimbursed, decreasing expenses would not increase profit from a project. As a result, it does not appear that a profit could arise.

In addition to these factors, the contracts would be for a specific project, not work as part of an ongoing relationship.

This analysis would suggest that the arrangements with the outside architects are contracts for service, not contracts of employment. Given this, source deductions would not be required.

## Solution to Assignment Problem Six - 7

Cody's minimum net business income for the year ending December 31, 2015 can be calculated as follows:

<b>Cody Jewel</b>	
<b>Statement Of Business Income</b>	
<b>For Year Ending December 31, 2015</b>	
Revenue Collected	\$216,000
Increase In Billed Receivables (\$72,000 - \$64,000)	8,000
<hr/>	
Total Revenue (Note 1)	\$224,000
<hr/>	
Vehicle Operating Costs [(\$4,140)(21,000 ÷ 23,000)]	\$ 3,780
Building Operating Costs	18,600
Payments To Assistants	31,200
Miscellaneous Office Costs	9,400
Business Meals [(50%)(10,500)]	5,250
CCA (Note 2)	48,354
CEC (Note 3)	1,680
<hr/>	
Total Expenses	\$118,264
<hr/>	
Net Business Income	\$105,736
<hr/>	

**Note 1** As Cody is a professional accountant he is eligible for the special rule under ITA 34 which allows him to recognize revenue on a billed basis. This means that he does not have to include his unbilled work-in-progress in his net business income.

**Note 2** The total CCA deductible would be as follows:

Class 1 (Calculation Follows)	\$22,800
Class 8 (Calculation Follows)	19,600
Class 50 (Calculation Follows)	495
Class 12 (Calculation Follows)	1,350
Class 10.1 (Calculation Follows)	4,109
<hr/>	
Total CCA	\$48,354
<hr/>	

**Class 1** As the building is used 100 percent for non-residential purposes, it is eligible for the enhanced rate of 6 percent. This means that the maximum CCA for 2015 would be:

Class 1 [(\$380,000)(6%)]	\$22,800
<hr/>	

**Class 8** The required calculations are as follows:

Opening Balance		\$ 41,000
Additions	\$136,000	
Disposal - Lesser Of:		
• Proceeds = \$22,000		
• Cost = \$65,000	( 22,000)	114,000
<hr/>		
One-Half Net Additions [(1/2)(\$114,000)]		( 57,000)
<hr/>		
CCA Base		\$ 98,000
Rate		20%
<hr/>		
Class 8 CCA		\$ 19,600
<hr/>		

**Class 50** The CCA on the new computer would be calculated as follows:

Class 50 [(1/2)(55%)(\\$1,800)]	\$495
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**Class 12** The CCA on the applications software would be calculated as follows:

Class 12 [(\\$2,700)(1/2)(100%)]	\$1,350
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**Class 10.1** As the car cost more than \$30,000, it must be put into a separate Class 10.1. The addition is limited to \$30,000. The deductible CCA is reduced by the personal usage of the car and would be calculated as follows:

Maximum Class 10.1 CCA [(30%)(1/2)(\\$30,000)]	\$4,500
Personal Usage [(2,000/23,000)(\\$4,500)]	( 391)
Deductible Class 10.1 CCA	\$4,109

**Note 3** Three-quarters of the \$32,000 cost of the client list would be allocated to Cumulative Eligible Capital. The CEC deduction for 2015 would be \$1,680 [(\\$32,000)(3/4)(7%)].

## Solution to Assignment Problem Six - 8

### Part A

Under ITA 18(12), the following conditions must be satisfied in order for expenses related to work space in a self-contained domestic establishment to be deductible:

- the work space is either the individual's principal place of business; or
- the work space is used exclusively for the purpose of earning income from business and is used on a regular and continuous basis for meeting clients, customers, or patients of the individual in respect of the business.

With respect to Mr. Larson's mail order business, the allocated space in his home would appear to be his principal place of business. This means that he would be able to deduct work space in home costs in determining his net business income.

### Part B

The calculation of the minimum net business income to be reported in Mr. Larson's personal tax return is as follows:

Revenues		\$182,000
Less: Expenses Other Than Home Work Space Costs:		
Cost Of Merchandise Sold	(\$98,000)	
Packaging Materials	( 2,400)	
Shipping Costs	( 4,600)	
Miscellaneous Office Supplies	( 560)	
Telephone	( 1,100)	
Printing Of Posters And Brochures	( 420)	
CCA (Note 1)	( 2,321)	( 109,401)
Income Before Home Work Space Costs		\$ 72,599
Less: Home Work Space Costs (Note 2)		( 4,332)
Net Business Income		\$ 68,267

**Note 1** Maximum CCA amounts on the assets of the business (not including CCA on the house) for the short fiscal year would be calculated as follows (alternative calculations shown in the two columns):

	100%	Short Fiscal Year (335/365)
Class 8 [(\$18,500)(1/2)(20%)]	\$1,850	\$1,698
Class 50 [(\$1,430)(1/2)(55%)]	393	361
Class 12 [(\$570)(1/2)(100%)]	285	262
Total	\$2,528	
Short Fiscal Year Factor	335/365	
Maximum CCA	\$2,320	\$2,321

**Note 2** The work space in home costs would be calculated as follows:

Utilities For Home (Heat, Light, And Water)	\$ 3,200
Mortgage Interest Paid	10,100
House Insurance	500
Property Taxes	4,300
Repairs And Maintenance For Home	2,600
Total	\$20,700
Class 1 CCA [(\$426,000 - \$150,000)(1/2)(4%)]	5,520
Total Costs For The Home	\$26,220
Percentage Of Floor Space	18%
Subtotal	\$ 4,720
Short Fiscal Year Factor	335/365
Deductible Home Work Space Costs	\$ 4,332

### **Part C**

There are two issues that should be discussed with Mr. Larson.

- As this problem asks for “minimum” net business income, CCA must be deducted on Mr. Larson’s home. The problem with this is that, if he takes CCA, it could jeopardize the principal residence exemption on this property, resulting in the payment of taxes on a portion of the taxable capital gain that might arise on any future sale of the property, assuming real estate prices are increasing. This is discussed in more detail in Chapter 8.
- Although it is not relevant for this year, Mr. Larson should be aware that the deduction of work space in home costs cannot be used to create a loss in the future. However, any amount not deductible because it is greater than his income can be deducted in any subsequent year provided there is sufficient income from the same business in that year. This provides for an unlimited carry forward of unused work space in home costs (see IT-514, *Work Space in Home Expenses*).

## Solution to Assignment Problem Six - 9

The minimum Net Income For Tax Purposes would be calculated as follows (the related item number in the problem precedes the adjustment):

Accounting Income		\$691,183
Add:		
I/S Total Income Tax Expense (\$182,000 + \$35,000)	\$217,000	
I/S Amortization Expense	550,000	
1 Accounting Bad Debt Expense (Note 1)	16,750	
1 2014 Reserve For Bad Debts	13,000	
2 Charitable Donations	27,000	
2 Bonus Payments (Deductible In 2015)	Nil	
2 Golf Club Membership Dues (\$12,000 + \$2,400)	14,400	
2 Business Meals And Entertainment [(1/2)(\$32,000)]	16,000	
2 Personal Meal Costs	5,000	
2 Staff BBQ (Fully Deductible)	Nil	
2 Production Sponsorships (Deductible)	Nil	
2 Advertising To U.S. Market (Deductible)	Nil	
2 Software Purchases (Capital Costs - Class 12 and 50)	38,000	
2 Costs Related To Amending Articles Of Incorporation (Added To CEC - Note 4)	6,000	
2 Thailand Convention Expenses (Note 2)	17,000	
3 Non-Deductible Penalty And Interest Expense	2,000	
3 Other Interest Expense (Deductible)	Nil	
4 Non-Deductible Travel Costs (Note 3)	1,570	
6 Income Inclusion On Sale Of Client List (CEC - Note 4)	43,902	
9 Taxable Capital Gain On Sale Of Shares (Note 5)	76,354	1,043,976
Deduct:		
1 Actual Bad Debt Write-Offs For 2015 (Note 1)	(\$ 11,750)	
1 2015 Reserve For Bad Debts (Note 1)	( 15,000)	
5 Maximum CCA (Note 6)	( 197,693)	
5 Terminal Loss (Note 6)	( 5,000)	
6 Net Accounting Gain On Disposal Of Intangibles [((\$115,000 - Nil) - (\$80,000 - \$63,000)]	( 98,000)	
8 Landscaping Costs Capitalized For Accounting Purposes	( 35,000)	( 362,443)
Net Income For Tax Purposes		\$1,372,716

**Note 1** While this would be unusual in practice, the accounting figure for bad debt expense is different from the tax figure. Given this, we have added back the accounting deduction of \$16,750, and included the appropriate amounts for tax purposes.

**Note 2** It is likely that the CRA would argue that a convention in Thailand is not consistent with the territorial scope of the corporation. However, an argument could be made that, given it deals with costume design and is an annual convention, it should be deductible.

**Note 3** Since the kilometer-based allowances were non-taxable, the deductible mileage is \$0.55 for the first 5,000 kilometers per employee and \$0.49 for additional kilometers. The non-deductible automobile expenses are calculated as follows:

Actual milage paid:	
[(\$0.59)(7 employees @ 4,000) + (1 @ 7,500)]	\$20,945
Deductible portion:	
{[((\$0.55)(7 @ 4,000 + 1 @ 5,000)] + [\$0.49 @ 2,500]}	( 19,375)
Non-deductible portion	\$ 1,570

**Note 4** The addition to income from the cumulative eligible capital account is calculated as follows:

January 1, 2015 Balance	\$18,098
Addition: Costs Of Amending Articles Of Incorporation	
[(3/4)(\$6,000)]	4,500
Disposal Of Client List [(3/4)(\$115,000)]	( 86,250)
Balance After Disposal	(\$63,652)

The amount to be added to income is comprised of the following:

CEC Deductions Taken In Previous Years:	
Incorporation Fees [(3/4)(\$30,000)]	\$22,500
Less January 1, 2015 Balance	( 18,098)
CEC Deducted Previously	\$ 4,402
Balance (\$63,652 - \$4,402)	\$59,250
Conversion Factor [(3/4 ÷ 1/2)	2/3
	39,500*
Total Income Inclusion From Disposal Of Eligible Capital	\$43,902

\*The \$39,500 can also be calculated as [(1/2)(\$115,000 - \$30,000 - \$6,000)].

**Note 5** The capital gain was credited to retained earnings in error. It is necessary to add the taxable portion of \$76,354 [(1/2)(\$152,708)] to income in order to calculate net income for tax purposes.

**Note 6** The CCA, and terminal loss for the year ending December 31, 2015, can be calculated as follows:

Class 1 - Existing Building

Opening UCC	\$650,000
Rate (Class 1)	4%
Class 1 CCA	\$ 26,000

Class 1 - New Building - Separate Class

Opening UCC	Nil
Addition	\$475,000
One-Half Net Additions	( 237,500)
CCA Base	\$237,500
Rate (Class 1 > 90% used for manufacturing)	10%
Class 1 CCA	\$ 23,750

## Class 6 - Fence

Opening UCC	Nil
Addition	\$52,000
One-Half Net Additions	( 26,000)
CCA Base	\$ 26,000
Rate (Class 6)	10%
Class 6 CCA	\$ 2,600

## Class 8 - Office and other Equipment

Opening UCC	\$95,000
Addition	1,200
Disposition - Lesser Of:	
Capital Cost = \$5,000	
Proceeds Of Disposition = \$3,500	( 3,500)
CCA Base	\$92,700
Rate (Class 8)	20%
Class 8 CCA	\$18,540

## Class 10.1 - Existing Automobile

Opening UCC And CCA Base	\$17,850
Rate (Class 10.1)	30%
Class 10.1 Full CCA	\$ 5,355
Claim (50 Percent In Year Of Disposition)	50%
Class 10.1 CCA On Sold Automobile	\$2,678

## Class 10.1 - Replacement Automobile

Opening UCC	Nil
Addition, Limited To \$30,000	\$30,000
One-Half Net Additions	( 15,000)
CCA Base	\$15,000
Rate (Class 10.1)	30%
Class 10.1 CCA	\$ 4,500

## Class 12 - Applications Software

Opening UCC	Nil
Addition	\$13,000
One-Half Net Additions	( 6,500)
CCA Base	\$ 6,500
Rate (Class 12)	100%
Class 12 CCA	\$ 6,500

## Class 14 - Limited Life Intangibles

Opening UCC	\$68,000
Disposition - Lesser Of:	
Capital Cost = \$95,000	
Proceeds Of Disposition = \$63,000	( 63,000)
Positive Ending Balance = Terminal Loss	\$ 5,000

## Class 29 - Manufacturing and Processing Equipment

The 2012 addition to Class 29 was fully depreciated for tax purposes in 2014 (25% claim in 2012, 50% in 2013, and the final 25% in 2014). The 2014 addition of \$180,000 will have resulted in a claim of \$45,000 [(25%)(\\$180,000)] for that year, leaving the opening balance of \$135,000.

Class 29 CCA [(50%)(\\$180,000)]	\$90,000
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## Class 44 - Limited Life Patent

Opening UCC And CCA Base Rate (Class 44)	\$ 65,000 25%
Class 44 CCA	\$ 16,250

## Class 50 - Systems Software

Opening UCC	Nil
Addition	\$25,000
One-Half Net Additions	( 12,500)
CCA Base	\$12,500
Rate (Class 50)	55%
Class 50 CCA	\$ 6,875

**Summary of CCA**

Class 1 CCA - Existing Building	\$ 26,000
Class 1 CCA - New Building, separate class	23,750
Class 6 CCA	2,600
Class 8 CCA	18,540
Class 10.1 CCA (\$2,678 + \$4,500)	7,178
Class 12 CCA	6,500
Class 29 CCA	90,000
Class 44 - Limited Life Patent	16,250
Class 50 CCA	6,875
Total CCA	\$197,693
Terminal Loss - Class 14	\$ 5,000

**Factors Not Affecting Solution (Not Required)**

- The bonuses paid June 15, 2016 are fully deductible as they were paid within 180 days of the end of the year in which they were accrued.
- The cost of the annual barbeque for all staff is fully deductible.
- Sponsorship of various themed theater productions that use Angie's costumes is fully deductible as an advertising expense.
- Advertising in a U.S. theater magazine to promote the business to U.S. customers is a deductible cost.
- The interest expense amounts related to operations and late payment of municipal property taxes are fully deductible.

## Solution to Assignment Problem Six - 10

### Part A - Justification For Deductibility

In order to establish if any dog-related expenses are deductible, it must first be determined if the dog was acquired for the purpose of producing income from Lorna's practice. It appears quite clear from the problem that Sigmund was purchased in order to increase Lorna's revenues.

Since Sigmund was legitimately acquired in connection with a business, the expenses related to his maintenance and training (food, vet bills, etc.) would be deductible in full. It is possible that the CRA would claim that there is a personal benefit associated with the ownership of Sigmund. To the extent that this claim could be enforced, some part of the deductions for Sigmund would be lost.

However, since the original intent was to acquire a dog to be specially trained to be used as a therapy dog, there is a strong case for the full deduction of the costs associated with Sigmund.

There would be no requirement to show how much income was actually attributable to Sigmund's efforts, only that a connection is made to the income earning process. With that connection established, there would be no need to allocate expenses based on when Sigmund actually began to work.

### Part B - Calculation Of Deductible Expenses

For the year ending December 31, 2015, Lorna would be able to deduct the following expenditures:

Food, including puppy vitamins and supplements	\$ 2,600
Veterinary fees	800
Therapy dog training course fees	1,400
Dog walking fees paid to Alec (Note 1)	3,280
Car lease for SUV (Note 2)	3,095
Operating expenses for SUV	2,950
Purchase of paw protectors (Note 3)	140
Class 8 CCA (Note 3)	122
<b>Total Deductions</b>	<b>\$14,387</b>

**Note 1** Since Alec is charging Lorna the fair market rate for the dog walking service, the fee would be deductible.

**Note 2** The amount that Lorna can deduct for the SUV lease payments is limited to \$3,095, the least of:

- \$5,700 [(\$950)(6)];
- \$4,907 [(\$800)(184/30)]; and
- \$3,095 {[\$5,700][(\$30,000 ÷ (85%)(65,000))]}.

**Note 3** Any clothing that would normally be replaced within a year would be deductible. However, clothing expected to last for longer than a year would be included in Class 8 as would the dog crate. As a result, the Class 8 CCA would be equal to \$122 [(\$820 + \$400)(1/2)(20%)].

### Part C - Sale Of Sigmund

As stated in the problem, Sigmund's purchase cost is a capital asset that cannot be claimed as depreciable property. As a result, the gain on Sigmund's sale is capital in nature and the taxable capital gain is equal to \$3,250 [(1/2)(\$8,700 - \$200 - \$2,000)].

Assuming Lorna has no other Class 8 assets, the UCC of Class 8 at January 1, 2017 would be equal to \$878 [\$1,220 - \$122 - (20%)(1,220 - \$122)]. Since she received \$200 for these items, Lorna has a terminal loss of \$678.

The net increase in Lorna's Net Income For Tax Purposes for 2017 would equal \$2,572 (\$3,250 - \$678).

**Note To Instructor**

Since the question of whether a therapy dog is a depreciable asset is not answered specifically in the textbook, the fact that it is not depreciable was stated in the problem. If you are interested in how this conclusion was reached, we offer the following analysis.

The first thing we observe is that the nature of a dog is technically that of a capital expenditure meaning that ITA 18(1)(b) prevents any deduction except to the extent permitted by ITA 20. You then observe that there is no specific deduction under ITA 20 that would recognize such an expense though there are general rules that might apply.

The first issue to resolve is whether CCA could be claimed. ITR 1102(2) sets out a few ground rules as to what definitely cannot be claimed as CCA. ITR 1102(1)(c) states that CCA cannot be deducted on a capital expenditure that was not incurred for the purpose of earning income. ITR 1102(1)(b) precludes CCA where the cost of a dog would be included in inventory. As a result, a person who breeds dogs as a business would be able to deduct the capital expenditures related to the dog breeding through a cost of goods sold inventory deduction.

So if a dog is acquired for the purpose of earning income and is not part of an inventory then a CCA deduction is not necessarily prohibited. What is needed next is a relevant CCA class.

When you search through the classes you quickly discover that there is no class that refers to animals at all. (There are special inventory rules for livestock such as cattle but as inventory only, not as deductible CCA.) This leads you to Class 8 which is commonly referred to as the catch-all class designed to pick up anything not included in some other class. When you look at the description of Class 8 you will see that paragraph (i) includes within Class 8 any tangible capital property not included in some other class, but then it lists a number of exclusions one of which is an "animal".

As a result, it must be concluded that the original cost of the therapy dog cannot be written off through CCA and is a non-depreciable property.

## Solution to Assignment Problem Six - 11

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### Part A - No Election

If the ITA 22 election is not made, the tax consequences for Gail Gates would be as follows:

Add: 2014 Reserve For Doubtful Debts	\$15,000
2015 Income Inclusion	\$15,000

While Gail has an allowable capital loss of \$7,000  $[(1/2)(\$263,000 - \$249,000)]$ , she will not be able to deduct this amount as she has had no capital gains in the previous three years and does not expect to have any in the current or subsequent years.

If the ITA 22 election is not made, the tax consequences to Mandy Portals would be as follows:

Proceeds Of Disposition (Amount Collected)	\$251,000
Adjusted Cost Base	( 249,000)
Capital Gain	\$ 2,000
Inclusion Rate	1/2
2015 Income Inclusion	\$ 1,000

### Part A - Election

If the ITA 22 election is made, the tax consequences for Gail would be as follows:

Add: 2014 Reserve For Doubtful Debts	\$15,000
Deduct: Business Loss (\$263,000 - \$249,000)	( 14,000)
2015 Income Inclusion	\$ 1,000

If the ITA 22 election is made, the tax consequences to Mandy would be as follows:

Add: Face Value - Price Paid (\$263,000 - \$249,000)	\$14,000
Deduct: Actual Write-Offs (\$263,000 - \$251,000)	( 12,000)
2015 Income Inclusion	\$ 2,000

### Part B

For Gail Gates, the ITA 22 election is clearly desirable, converting a \$15,000 income inclusion into a \$1,000 inclusion.

For Mandy Portals, the fact that actual collections (\$251,000) exceed the estimated value of the Accounts Receivable on the date of the sale (\$249,000), means that the ITA 22 election would not be desirable. It would double her income inclusion from \$1,000 to \$2,000.

## Solution to Assignment Problem Six - 12

### Part A

#### Net Income For Tax Purposes And Taxable Income

**Dorian** Dorian's net employment income would be calculated as follows:

Salary		\$ 92,500
Registered Pension Plan Contributions	(	5,600)
Automobile Benefit (Note 1)		13,200
Travel Allowance (Note 2)		Nil
Travel Costs (Note 2)		Nil
Gifts (Note 3)		400
Workspace In The Home Costs (Note 4)	(	370)
<b>Net Employment Income</b>		<b>\$100,130</b>

**Note 1** As more than 50 percent of Dorian's kilometers are employment related, he qualifies for the reduced standby charge and the alternative calculation of the operating cost benefit. Given this, the required calculations are as follows:

Standby Charge [(2%)(11)(\$40,000)(18,337 ÷ 18,337*)]	\$ 8,800
Operating Cost Benefit - Lesser Of:	
• [(1/2)(\$8,800)] = \$4,400	
• [(\$0.27)(23,000)] = \$6,210	4,400
<b>Total Benefits</b>	<b>\$13,200</b>

\*[(11)(1,667)] While Dorian's personal mileage totaled 23,000 kilometers, the numerator of this reduced standby charge fraction cannot exceed the denominator.

**Note 2** Given that the \$6,600 allowance is very close to Dorian's actual expenditures, we can assume that the CRA would view the allowance as reasonable. Given this, the allowance will not be included in Dorian's employment income and, as a consequence, he cannot deduct his actual travel costs.

**Note 3** As gift certificates are considered near cash gifts, the \$400 will have to be included in Dorian's employment income. However, as the Christmas basket has a value of less than \$500, it can be excluded.

**Note 4** Of the items listed, the only cost that Dorian can base a deduction on as an employee is his outlays for utilities and maintenance. The amount would be \$370 [(20%)(1,850)].

Dorian's net business income would be calculated as follows:

Accounting Net Income		\$71,500
Additions:		
Amortization Expense	\$31,200	
Business Meals [(1/2)(\$11,000)]	5,500	36,700
Deductions:		
CCA (Note 5)	(	42,220)
Landscaping Costs	(	12,600)
<b>Net Business Income</b>		<b>\$53,380</b>

**Note 5** Maximum CCA is calculated as follows:

Class 1 [(6%)(\\$351,000)]		\$21,060
Class 8 Opening Balance		\$63,400
Additions	\$21,100	
Dispositions - Lesser Of Capital Cost = \$18,000 Proceeds = \$11,300	( 11,300)	9,800
One-Half Net Additions		( 4,900)
CCA Base		\$68,300
Rate		20%
Class 8 CCA		\$13,660
Class 10 [(30%)(25,000)]		\$7,500

The total would be \$42,220 (\$21,060 + \$13,660 + \$7,500).

Dorian's Net Income For Tax Purposes and Taxable Income can be calculated as follows:

Net Employment Income	\$100,130
Net Business Income	53,380
Net Income For Tax Purpose	\$153,510
Deductions	Nil
Taxable Income	\$153,510

**Gloria** Gloria's Net Income For Tax Purposes and Taxable Income would simply be the \$8,200 that was given in the problem.

### **Base Tax Payable**

**Dorian** Based on the Taxable Income of \$153,510 that has been calculated for Dorian, his Base Tax Payable would be calculated as follows:

Tax On First \$138,586		\$29,327
Tax On Next \$14,924 (\$153,510 - \$138,586) At 29 Percent		4,328
Tax Before Credits		\$33,655
Non-Refundable Credits Other Than Donations:		
Basic Personal Amount	(\$11,327)	
Spousal (\$11,327 - \$8,200)	( 3,127)	
EI Premiums	( 931)	
CPP Contributions	( 2,480)	
Canada Employment	( 1,146)	
Transfer Of Bart's Education Related Credits (Note 6)	( 5,000)	
Medical Expenses (Note 7)	( 3,295)	
Child Fitness - Lesser Of • \$4,200; and • \$1,000	( 1,000)	
Credit Base	\$28,306	
Rate	15%	(\$ 4,246)
Charitable Donations [(15%)(\\$200) + (29%)(\\$3,200 - \$200)]		( 900)
Dorian's Base Tax Payable		\$28,509

**Note 6** Bart's total education related amounts are calculated as follows:

Tuition	\$ 8,700
Education [(10)(\$400)]	4,000
Textbook [(10)(\$65)]	650
Total	\$13,350

The transfer would be the lesser of \$5,000 and this total. This will leave Bart with a carry forward of education related amounts of \$8,350 (\$13,350 - \$5,000).

**Note 7** As it would appear that Gloria's liposuction surgery is purely cosmetic, it cannot be included in the base for the family's medical expenses. Given this, the base amount for medical expenses would be calculated as follows:

Dorian And Oscar (\$1,350 + \$1,250)	\$2,600
Reduced By The Lesser Of:	
• [(3%)(\$153,510)] = \$4,605	
• 2015 Threshold Amount = \$2,208	( 2,208)
Bart's Medical Expenses	\$3,125
Reduced By Lesser Of:	
• [(3%)(\$7,400)] = 222	
• \$2,208	( 222)
Allowable Medical Costs	\$3,295

### ***Gloria's Base Tax Payable***

Gloria's Base Tax Payable would be calculated as follows:

Tax Before Credits [(15%)(\$8,200)]	\$1,230
Basic Personal Credit [(15%)(\$11,327)]	( 1,699)
Gloria's Base Tax Payable	Nil

### ***Combined Base Tax Payable***

The combined Base Tax Payable for Dorian and Gloria would be \$28,509 (\$28,509 + Nil).

## **Part B**

### ***The Required Transfer***

In calculating the combined Adjusted Base Tax Payable, the required transfer would be the lesser of \$50,000 and \$72,655 [(\$153,510 - \$8,200) ÷ 2]. Transferring the lesser amount of \$50,000 will leave Dorian with Adjusted Taxable Income of \$103,510 (\$153,510 - \$50,000) and Gloria with Adjusted Taxable Income \$58,200 (\$8,200 + \$50,000).

### ***Adjusted Base Tax Payable***

**Gloria** Gloria's Adjusted Base Tax Payable would be calculated as follows:

Tax On First \$44,701	\$6,705
Tax On Next \$13,499 (\$58,200 - \$44,701) At 22 Percent	2,970
Tax Payable Before Credit	\$9,675
Basic Personal Credit [(15%)(\$11,327)]	( 1,699)
Gloria's Adjusted Base Tax Payable	\$7,976

**Dorian** Dorian's Adjusted Base Tax Payable would be calculated as follows:

Tax On First \$89,401		\$16,539
Tax On Next \$14,109 (\$103,510 - \$89,401) At 26 Percent		3,668
<hr/>		
Tax Before Credits		\$20,207
Non-Refundable Credits Other Than Donations:		
Basic Personal Amount	(\$11,327)	
Spousal (\$11,327 - \$8,200)	( 3,127)	
EI Premiums	( 931)	
CPP Contributions	( 2,480)	
Canada Employment	( 1,146)	
Transfer Of Bart's Education		
Related Credits (Note 6)	( 5,000)	
Medical Expenses (Note 7)	( 3,295)	
Child Fitness - Lesser Of		
• \$4,200; and		
• \$1,000	( 1,000)	
<hr/>		
Credit Base Before Spousal Adjustment	(\$28,306)	
Spousal Adjustment (\$11,327 - \$8,200)	3,127	
<hr/>		
Credit Base	(\$25,179)	
Rate	15%	( 3,777)
<hr/>		
Charitable Donations		
[(15%)(200) + (29%)(3,200 - 200)]		( 900)
<hr/>		
Dorian's Adjusted Base Tax Payable		\$ 15,530
<hr/>		

Note that the non-refundable credits claimed here are the same as those used in the determination of Dorian's Base Tax Payable (we have not duplicated the calculations here, but simply referred to the notes that were provided with the Base Tax Payable calculation). The only difference is the spousal adjustment which removes the spousal credit amount.

### **Combined Adjusted Base Tax Payable**

The combined Adjusted Base Tax Payable would total \$23,506 (\$7,976 + \$15,530).

### **Part C**

The Family Tax Cut for Dorian and Gloria would be the lesser of \$2,000 and \$5,003 (\$28,509 - 23,506). The lesser figure is \$2,000.

### **Part D**

The combined Tax Payable for Dorian and Gloria, after the application of the Family Tax Cut would be calculated as follows:

Dorian's Tax Payable Before The Family Tax Cut		\$28,509
(Same As Base Tax Payable)		
Gloria's Tax Payable (Same As Base Tax Payable)		Nil
Family Tax Cut - Maximum		( 2,000)
<hr/>		
Combined Tax Payable After The Family Tax Cut		\$26,509
<hr/>		

## Solution to Assignment Problem Six - 13

### Part A(1) - Minimum Net Income For Tax Purposes

#### Net Employment Income

Net Employment Income would be calculated as follows:

Base Salary	\$50,000
Commission Income	
$[(1.5\%)(\$2,800,000 + \$200,000 - \$300,000)]$	40,500
Group Term Life Insurance Premium $[(\$5)(\$50,000 \div \$1,000)]$	250
Award $(\$900 - \$500)$	400
Eligible Housing Loss $[(1/2)(\$20,000 - \$15,000)]$	2,500
Stock Option Benefit $[(3,000)(\$20 - \$17)]$	9,000
Interest Benefit On Employee Loan $[(1\%)(3,000)(\$17)(334/365)]$	467
Standby Charge $[(2/3)(\$450)(12)(8,000 \div 20,004)]$	1,440
Operating Cost Benefit (See Part B) - Lesser Of:	
• $[(8,000)(\$0.27)] = \$2,160$	
• $[(1/2)(\$1,440) = \$720$	720
RPP Contributions	( 3,000)
Salesperson Expenses (Note 1)	( 6,966)
Professional Membership Dues	( 1,400)
<b>Net Employment Income</b>	<b>\$93,911</b>

**Note 1** Salesperson expenses would be calculated as follows:

Automobile expenses $[(\$5,400)(27,000 \div 35,000)]$	\$4,166
Meals and entertainment $[(50\%)(\$2,600)]$	1,300
Hotels	1,500
<b>Total Expenses (Less Than Commissions)</b>	<b>\$6,966</b>

#### Net Business Income

Net Business Income would be calculated as follows:

Revenues	\$40,000
Supplies Used $(\$1,600 + \$12,000 - \$900)$	( 12,700)
Business Telephone	( 800)
Work Space In The Home Expenses (Note 2)	( 5,000)
Automobile Operating Expenses (100 percent)	( 3,000)
CCA (Note 3)	( 6,690)
<b>Net Business Income</b>	<b>\$11,810</b>

**Note 2** Work space in the home expenses would be calculated as follows:

Utilities	\$ 5,400
Property Taxes	3,800
Maintenance	1,600
Insurance	1,900
Mortgage Interest	12,300
<b>Total House Expenses</b>	<b>\$25,000</b>
Business Use Of Residence	20%
<b>Work Space In The Home Expenses</b>	<b>\$ 5,000</b>

**Note 3** The CCA would be calculated as follows:

Class 8		
Opening UCC	\$3,100	
One-Half Additions [(1/2)(\$2,200)]	<u>1,100</u>	
Balance	\$4,200	
Rate	<u>20%</u>	\$ 840
Class 10.1- Old Car		
[((\$9,000)(30%)(1/2)] (Note 4)	\$1,350	
Class 10.1- New Car In Separate Class		
[((\$30,000)(30%)(1/2)]	4,500	5,850
Total CCA		<u>\$6,690</u>

**Note 4** The recapture rules do not apply to Class 10.1. Also with respect to Class 10.1, in the year of disposition, the taxpayer is entitled to claim one-half of the normal CCA on the opening class balance.

### **Taxable Capital Gains**

The taxable capital gain on the sale of the option shares would be calculated as follows:

Proceeds Of Disposition [(\$22)(2,000)]	\$44,000
Adjusted Cost Base [(\$20)(2,000)]	( 40,000)
Capital Gain	\$4,000
Inclusion Rate	1/2
Taxable Capital Gain	<u>\$2,000</u>

### **Minimum Net Income For Tax Purposes**

Minimum Net Income For Tax Purposes would be calculated as follows:

Net Employment Income	\$ 93,911
Net Business Income	11,810
Taxable Capital Gain On Shares	2,000
Interest Expense (Note 5)	( 467)
Net Income For Tax Purposes	<u>\$107,254</u>

**Note 5** As the loan was used for investment purposes, the employment income interest benefit of \$467, which is deemed to be interest paid by virtue of ITA 80.5, would be deductible by virtue of ITA 20(1)(c).

### **Part A(2) - Minimum Taxable Income**

Minimum Taxable Income would be calculated as follows:

Net Income For Tax Purposes	\$107,254
Stock Option Deduction [(1/2)(\$9,000)]	( 4,500)
Taxable Income	<u>\$102,754</u>

**Part A(3) - Minimum Federal Tax Payable**

Minimum Federal Tax Payable would be calculated as follows:

Tax On First \$89,401		\$16,539
Tax On Next \$13,353 [(26%)((\$102,754 - \$89,401))]		3,472
<hr/>		
Tax Before Credits		\$20,011
Tax Credits:		
Basic Personal Amount	( \$11,327)	
Eligible Dependant (Ryan)		
(\$11,327 - \$960 UCCB)	( 10,367)	
CPP	( 2,480)	
EI	( 931)	
Canada Employment	( 1,146)	
Transfer Of Tuition, Education And		
Textbook Credit From Julie (Note 6)	( 2,160)	
Child Fitness - Lesser Of:		
• \$1,000		
• \$700	( 700)	
Medical Expenses (Note 7)	( 1,792)	
<hr/>		
Subtotal	(\$30,903)	
Rate	15%	( 4,635)
Charitable Donations		
[(15%)(200) + (29%)(1,600 - 200)]		( 436)
<hr/>		
Federal Tax Payable		\$14,940
Federal Taxes Deducted At Source		( 15,000)
<hr/>		
Federal Tax Owing (Refund)		(\$ 60)
<hr/>		

**Note 6** The amount of the transfer will be the lesser of:

- \$5,000
- [ $\$1,600 + (4)(\$120) + (4)(\$20)$ ] = \$2,160

**Note 7** The base for the medical expense credit is calculated as follows:

Premiums Paid On Dental And Health Plan		\$1,500
Ryan's Orthodontic Work	\$5,000	
Employer Reimbursement (50%)	( 2,500)	2,500
<hr/>		
Total Eligible Expenses		\$4,000
Reduced By The Lesser Of:		
• [(3%)(107,254)] = \$3,218		
• \$2,208		( 2,208)
<hr/>		
Base For Medical Expense Credit		\$1,792
<hr/>		

## Part B - Tax Planning Advice

The following points are relevant here:

**Car Insurance** As her employer pays the insurance cost portion of her operating expenses, the usual operating cost benefit is applicable, despite the fact that Joan pays all the other operating costs. If alternatively, this was treated as a taxable allowance, the \$720 operating cost benefit would be eliminated. The net effect of this change would be as follows:

Elimination Of Operating Cost Benefit	(\$ 720)
Taxable Allowance Received	2,200
Deduction Of Insurance Costs [(\$2,200)(27,000 ÷ 35,000)]	( 1,697)
<u>Decrease In Employment Income</u>	<u>(\$ 217)</u>

**Compensation For Daughter** Joan should pay Julie a reasonable salary for her services to the business. Since Julie's net income is currently reported as \$7,200, a salary payment of up to \$5,273 (\$11,327 + \$1,146 - \$7,200) would not attract any federal tax as her basic personal amount of \$11,138 and Canada employment amount of \$1,146 would offset the tax. Although Julie would have education related tax credits to offset more income, this would mean the credits could not be transferred to Joan.

The payment of salary would be deductible to Joan, but would attract some employer EI premiums as well as some CPP premiums if the salary exceeds the CPP threshold of \$3,500.

## CHAPTER SEVEN SOLUTIONS

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### Solution to Assignment Problem Seven - 1

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**Case A**

Under ITA 20.1 (disappearing source provision), the \$190,000 balance will be deemed to be used to produce income. Therefore, he can continue to deduct the interest.

**Case B**

While the loan is secured by income producing assets, the direct purpose of the loan was not income producing. The interest cannot be deducted.

**Case C**

Since the proceeds exceed the borrowings, Mr. Brock has complete flexibility with respect to linking. He could allocate all of the \$42,000 to property A or B or alternatively, \$21,000 to each. Any allocation totaling \$42,000 would be acceptable.

**Case D**

When the value of the replacement property is less than the amount borrowed, the taxpayer must use a pro-rata allocation of the borrowed money. In this case, the result would be an allocation of \$25,000 [ $(\$20,000 \div \$80,000)(\$100,000)$ ] to property A and an allocation of \$75,000 [ $(\$60,000 \div \$80,000)(\$100,000)$ ] to property B.

## Solution to Assignment Problem Seven - 2

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**Note To Instructor** The value of the land for the properties that have been sold has been ignored in this problem to focus on the rental income issues.

### **Rental And Other Income**

For the four properties, CCA and other information related to disposals, would be calculated as follows:

	<b>124 Glengarry Avenue</b>	<b>436 Rankin Avenue</b>
January 1, 2015 UCC	\$563,086	Nil
Additions	63,000	\$947,000
One Half Net Additions: [(1/2)(\$63,000)]	( 31,500)	
[(1/2)(\$947,000)]		( 473,500)
CCA Base	\$594,586	\$473,500
Rate	5%	4%
Maximum CCA	\$ 29,729	\$ 18,940
	<b>4251 Oak Street</b>	<b>1322 Curry Avenue</b>
January 1, 2015 UCC	\$411,845	\$213,018
Dispositions - Lesser Of:		
\$456,000 Cost And \$523,000 POD	( 456,000)	
\$185,000 Cost And \$246,000 POD		( 185,000)
Subtotal	(\$ 44,155)	\$ 28,018
Recapture (Note 1)	44,155	
Terminal Loss (Note 2)		( 28,018)
CCA Base	Nil	Nil

**Note 1** As each rental property with a cost in excess of \$50,000 must be allocated to a separate CCA Class, the negative balance for the 4251 Oak Street property must be included in income as recapture.

**Note 2** As no assets remain in the separate class for 1322 Curry Avenue, the positive balance that remains can be deducted as a terminal loss.

The terminal loss for Class 8 would be calculated as follows:

January 1, 2015 UCC	\$3,598
Disposition - Lesser Of:	
• Cost = \$23,000	
• Proceeds Of Disposition = Nil	Nil
Balance With No Remaining Assets In The Class	\$3,598
Terminal Loss On Class 8 Assets	( 3,598)
CCA Base	Nil

The calculation of net rental income would be as follows:

Income (Loss) Before CCA	
124 Glengarry Avenue	\$ 8,600
4251 Oak Street	11,760
1322 Curry Avenue	( 2,190)
436 Rankin Avenue	4,495
Recapture	44,155
Terminal Loss On Class 1	( 28,018)
Terminal Loss On Class 8	( 3,598)
Income Before CCA	\$35,204
CCA (Note 3)	( 35,204)
Net Rental Income	Nil

**Note 3** Maximum available CCA is \$48,669 (\$29,729 + \$18,940). However, as CCA cannot be used to create a net rental loss, the CCA deduction is limited to \$35,204, the net rental income before CCA.

With respect to the question of the Class from which this amount will be deducted, when CCA is not maximized, the general rule is to deduct the amount taken from the Class with the lowest rate. This would suggest deducting \$18,940 from the Class 1 UCC balance for 436 Rankin Avenue, and the remaining \$16,264 (\$35,204 - \$18,940) from the 124 Glengarry Avenue Class 3 UCC balance.

If Ms. Roberts had any plans to sell 436 Rankin in the near future, it might be more beneficial to consider taking the maximum CCA on the 124 Glengarry Avenue building instead.

### **Taxable Capital Gain**

While the net rental income is nil, there would be a taxable capital gain of \$33,500 [(1/2)(\$523,000 - \$456,000)] on the disposition of the 4251 Oak Street building.

Note that the building at 1322 Curry Avenue is a depreciable property and its sale cannot create a capital loss. The difference between its capital cost of \$246,000 and the proceeds of disposition of \$185,000 has been written off through CCA and the terminal loss arising from its sale.

## Solution to Assignment Problem Seven - 3

### 2014

The maximum CCA for 2014 would be calculated as follows:

	Class 1	Class 8
Addition	\$690,000	\$43,000
One-Half Net Additions	( 345,000)	( 21,500)
CCA Base	\$345,000	\$21,500
Maximum CCA:		
[(4%)(\$345,000)]	( 13,800)	
[(20%)(\$21,500)]		( 4,300)
Add: One-Half Net Additions	345,000	21,500
January 1, 2015 UCC	\$676,200	\$38,700

Net Rental Income for 2014 would be calculated as follows:

Rental Revenue	\$63,600
Expenses Other Than CCA	( 23,400)
Income Before CCA	\$40,200
Class 1 CCA	( 13,800)
Class 8 CCA	( 4,300)
Net Rental Income	\$ 22,100

Note that when an individual uses assets to produce property income (e.g., rental income), the full calendar year is considered to be the taxation year of the individual. This means that the short fiscal period rules are not applicable to Mr. Thorne.

### 2015

The terminal loss for Class 8 would be calculated as follows:

January 1, 2015 UCC	\$38,700
Disposition - Lesser Of:	
• Cost = \$43,000	
• Proceeds Of Disposition = \$31,000	( 31,000)
Balance With No Remaining Assets In The Class	\$ 7,700
Terminal Loss	( 7,700)
January 1, 2016 UCC - Class 8	Nil

The terminal loss will be deducted from the Class 8 UCC leaving a January 1, 2016 balance of nil.

The maximum CCA for 2015 would be \$27,048 [(4%)(\$676,200)]. However, as the deduction of CCA cannot be used to create a loss, the actual amount deducted would be limited to \$17,400, as shown in the calculation of Net Rental Income:

Rental Revenue	\$54,500
Expenses Other Than CCA And Terminal Loss	( 29,400)
Terminal Loss On Class 8 Assets	( 7,700)
Income Before CCA	\$17,400
CCA (Limited To Income Before CCA)	( 17,400)
Net Rental Income	Nil

The January 1, 2016 UCC of the Class 1 building would be calculated as follows:

January 1, 2015 UCC	\$676,200
2015 CCA Deducted	( 17,400)
<hr/>	
January 1, 2016 UCC - Class 1	\$658,800
<hr/>	

## Solution to Assignment Problem Seven - 4

### Part A

The combined tax rates for the three sisters are 20 percent (15% + 5%), 37 percent (26% + 11%), and 45 percent (29% + 16%). Given these rates, the after tax returns on the bonds would be calculated as follows:

	Sarah (20%)	Sally (37%)	Suzanne (45%)
Interest [(4.5%)(15,000)]	\$675	\$675	\$675
Federal/Provincial Tax Payable At 20, 37, And 45 Percent	( 135)	( 250)	( 304)
After Tax Return	\$540	\$425	\$ 371

### Part B

The after tax returns resulting from an investment in the preferred stock begins with the calculation of the federal and provincial Tax Payable:

	Sarah (20%)	Sally (37%)	Suzanne (45%)
Dividends [(5.6%)(15,000)]	\$ 840	\$ 840	\$ 840
Gross Up Of 38 Percent	319	319	319
Taxable Dividend	\$1,159	\$1,159	\$1,159
Combined Rate (See Part A)	20%	37%	45%
Tax Before Dividend Tax Credit	\$ 232	\$ 429	\$ 522
Dividend Tax Credit [(6/11 + 27%)(319)]	( 260)	( 260)	( 260)
Tax Payable (Tax Savings)	(\$ 28)	\$ 169	\$ 262

Based on the preceding calculations of federal and provincial Tax Payable, the after tax returns on the preferred shares are calculated as follows:

	Sarah (20%)	Sally (37%)	Suzanne (45%)
Dividends [(5.6%)(15,000)]	\$840	\$840	\$840
Tax Savings (Tax Payable)	28	( 169)	( 262)
After Tax Return	\$868	\$671	\$578

### Comparison

A comparison of the after tax rates of return can be made as follows:

	Sarah (20%)	Sally (37%)	Suzanne (45%)
After Tax Interest	\$540	\$425	\$371
After Tax Dividends	( 868)	( 671)	( 578)
Advantage (Disadvantage) Of Bonds	(\$328)	(\$246)	(\$207)

### Recommendation

For each of the sisters, the preferred stock offers the superior after tax return. Note, however, that the advantage of the dividends declines as the taxpayer's tax rate increases.

## Solution to Assignment Problem Seven - 5

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### Analysis

The major considerations in deciding between the two alternative investment strategies are the after tax return and the certainty of the related cash flows.

**Income Trust Units** The cash flows associated with investments in trust units are not guaranteed. However, the distributions made by these trusts tend to be fairly stable and, in general, involve less risk than dividends on common shares. Your investment of \$450,000 will result in you owning 30,000 shares ( $\$450,000 \div 15$ ).

As the monthly distribution includes \$0.025 as a return of capital, you will only be taxed on \$0.030 of the monthly distribution. Based on this, your Tax Payable will be calculated as follows:

Taxable Income $[(12)(\$0.030)(30,000)]$	\$10,800
Tax Rate (Given)	34%
<hr/>	<hr/>
Tax Payable	\$ 3,672
<hr/>	<hr/>

When you sell the shares at \$15 per unit, there will be additional taxes as follows:

Proceeds Of Disposition $[(\$15)(30,000)]$	\$450,000
Adjusted Cost Base:	
Original Cost	\$450,000
Less Tax Free Return Of Capital	
$[(12)(\$0.025)(30,000)]$	( 9,000)
<hr/>	<hr/>
Capital Gain (= Return Of Capital)	\$ 9,000
Inclusion Rate	1/2
<hr/>	<hr/>
Taxable Capital Gain	\$ 4,500
Personal Tax Rate	34%
<hr/>	<hr/>
Tax Payable	\$ 1,530
<hr/>	<hr/>

Your after tax return would be calculated as follows:

Trust Distributions $[(12)(\$0.055)(30,000)]$	\$19,800
Tax Payable ( $\$3,672 + \$1,530$ )	( 5,202)
<hr/>	<hr/>
After Tax Retention - Income Trust	\$14,598
<hr/>	<hr/>

**Common Stock Purchase** If you invest the \$450,000 in the common stock, you will acquire 3,750 shares ( $\$450,000 \div \$120$ ). The anticipated taxable income from these shares for the year is calculated as follows:

Eligible Dividends $[(\$1.75)(3,750)]$	\$ 6,563
Gross Up $[(38\%)(\$6,563)]$	2,494
Taxable Capital Gain $[(1/2)(3,750)(\$124 - \$120)]$	7,500
<hr/>	<hr/>
Taxable Income	\$16,557
<hr/>	<hr/>

Based on this figure, your Tax Payable would be calculated as follows:

Taxable Income	\$16,557
Tax Rate	34%
<hr/>	
Tax Payable Before Credits	\$5,629
Dividend Tax Credit [(6/11 + 36%)(\$2,494)]	( 2,258)
<hr/>	
Tax Payable	\$3,371
<hr/>	

Your after tax return would be calculated as follows:

Eligible Dividends Received	\$ 6,563
Capital Gain (100%)	15,000
<hr/>	
Pre Tax Cash Flow	\$21,563
Tax Payable	( 3,371)
<hr/>	
After Tax Retention - Common Stock	\$18,192
<hr/>	

### **Conclusion**

Using your estimates for investment returns, the better investment, based purely on after tax returns, is the common stock purchase. It provides an additional \$3,594 (\$18,192 - \$14,598). However the common stock investment involves more risk and uncertainty.

You will have to make a decision as to whether the additional \$5,017 warrants the assumption of additional risk.

## Solution to Assignment Problem Seven - 6

Ms. Smursch's minimum Net Income For Tax Purposes would be calculated as follows:

Income From A Business Or Profession:		
Billed Revenues (\$345,000 + \$23,000 - \$14,000)	\$354,000	
Office Supplies And Office Expenses	( 23,000)	
Rent	( 60,000)	
Meals And Entertainment [(1/2)(\$18,000)]	( 9,000)	
Convention Expenses (Note 1)	( 2,400)	\$259,600
Property Income:		
Income From Income Trust [(\$3.50 - \$1.50)(2,500)]		5,000
Taxable Capital Gain (Note 2)		8,417
Minimum Net Income For Tax Purposes		<u>\$273,017</u>

**Note 1** Unless the scope of Ms. Smursch's business is likely to extend to this activity in the Middle East, the costs of the Beirut convention cannot be deducted.

**Note 2** The adjusted cost base of the Realty Income Trust units would be calculated as follows:

Original Cost [(2,500)(\$43.00)]	\$107,500
Reinvestment Of Distribution [(2,500)(\$3.50)]	8,750
Tax Free Return Of Capital [(2,500)(\$1.50)]	( 3,750)
Adjusted Cost Base	<u>\$112,500</u>

The taxable capital gain on the disposition of all the units would be calculated as follows:

Proceeds Of Disposition	\$129,333
Adjusted Cost Base	( 112,500)
Capital Gain	\$ 16,833
Inclusion Rate	1/2
Taxable Capital Gain	<u>\$ 8,417</u>

The distribution reinvestment resulted in 194.44 addition shares ( $\$8,750 \div \$45$ ). However, this number is irrelevant as all of the units were sold.

## Solution to Assignment Problem Seven - 7

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### Taxable Income And Tax Payable

The amount of taxable income and tax payable resulting from the investments would be calculated as follows:

<b>Public Company Shares</b>			
Eligible Dividends [(\$1.10)(5,000)]	\$ 5,500		
Gross Up [(\$5,500)(38%)]	<u>2,090</u>	\$ 7,590	
Capital Gain [(1/2)(5,000)(\$22 - \$20)]		<u>5,000</u>	\$12,590
<b>CCPC Shares</b>			
Non-Eligible Dividends [(\$5.00)(1,250)]		\$ 6,250	
Gross Up [(\$6,250)(18%)]		<u>1,125</u>	7,375
<b>Income Trust</b>			
Distribution [(\$0.90)(12,500)]		\$11,250	
Return Of Capital [(\$0.40)(12,500)]		<u>( 5,000)</u>	6,250
<b>Mutual Fund</b>			
Capital Gain [(1/2)(\$0.60)(4,000)]		\$ 1,200	
Eligible Dividends [(\$0.80)(4,000)]	\$ 3,200		
Gross Up [(\$3,200)(38%)]	<u>1,216</u>	4,416	
Property Income [(\$0.35)(4,000)]		<u>1,400</u>	7,016
<b>Foreign Term Deposit</b>			
Foreign Interest [(€8,000)(\$1.25)]		\$10,000	
Excess Withholding - See Note [(20% - 15%)(€8,000)(\$1.25)]		<u>( 500)</u>	9,500
Taxable Income			\$42,731
Tax Rate (29% + 16%)			45%
Tax Before Credits			\$19,229
Dividend Tax Credit - Eligible Dividends [(\$2,090 + \$1,216)(6/11 + 30%)]			( 2,795)
Dividend Tax Credit - Non-Eligible Dividends [(\$1,125)(13/18 + 25%)]			( 1,094)
Foreign Tax Credit [(15%)(€8,000)(\$1.25)] - See Note			<u>( 1,500)</u>
Tax Payable			\$13,840

**Note - Foreign Source Property Income** As required, 100 percent of the foreign interest is included in Net Income For Tax Purposes. However, for individuals, the credit against Tax Payable that is provided under ITA 126(1) is limited to a maximum of 15 percent of the foreign source non-business income. Since the withheld amount exceeds 15 percent, the excess is deducted and does not qualify for treatment as a foreign tax credit.

### Adjusted Cost Base - RioKan Income Trust

The investment of the \$11,250 [(\$0.90)(12,500)] distribution will result in an additional 1,285.71 (\$11,250 ÷ \$8.75) units, for a total of 13,785.71 (12,500 + 1,285.71) units. The adjusted cost base of all of the units would be calculated as follows:

Original Units [(\$8.00)(12,500)]	\$100,000
Reinvestment In New Shares [(\$0.90)(12,500)]	11,250
Return Of Capital [(\$0.40)(12,500)]	( 5,000)
<u>Total Adjusted Cost Base</u>	<u>\$106,250</u>

Based on this, the adjusted cost base per unit would be calculated as follows:

$$\$106,250 \div 13,785.71 = \$7.71$$

***Adjusted Cost Base - Fidel Large Cap Mutual Fund***

The investment of the \$7,000 [(\$1.75)(4,000)] distribution at \$26.50 per unit will result in an additional 264.15 ( $\$7,000 \div \$26.50$ ) units, for a total of 4,264.15 units. The total adjusted cost base of these units would be \$107,000 [(4,000)(\\$25) + \$7,000]. Given this, the adjusted cost base per unit would be calculated as follows:

$$\$107,000 \div 4,264.15 = \$25.09$$

## Solution to Assignment Problem Seven - 8

### Part A

#### Employment Income

Christopher's net employment income would be calculated as follows:

Salary	\$67,460
Additions:	
Travel Allowances (Note 1)	
Hotels And Food	Nil
Use Of Personal Automobile	5,200
Interest Free Loan Benefit [(1%)(20,000)]	200
Deductions:	
Hotels And Food (Note 1)	Nil
Automobile Costs (Note 2)	( 7,680)
RPP Contributions	( 4,200)
<u>Net Employment Income</u>	<u>\$60,980</u>

**Note 1** Given his actual costs, the allowance for hotels and food seems reasonable. This means it does not have to be included in income. However, this will prevent Christopher from deducting his actual costs. With respect to the allowance for personal use of his automobile, it is not based on kilometers driven and this means it cannot be considered "reasonable". It must be included in income.

**Note 2** His deductible automobile costs would be calculated as follows:

Operating Costs	\$4,900
CCA On Class 10.1 [(1/2)(30%)(30,000)]	4,500
Interest On Loan [(1%)(20,000)]	200
<u>Total Automobile Costs</u>	<u>\$9,600</u>
Employment Related Percentage (25,600 ÷ 32,000)	80%
<u>Total Deductible Costs</u>	<u>\$7,680</u>

The luxury car rules limit the capital cost of the car to \$30,000 for vehicles purchased during 2015. Also note that the \$200 of imputed interest on the car loan is deemed to be interest paid for purposes of determining motor vehicle costs under ITA 8(1)(j).

#### Net Property Income

Christopher's net property income would be calculated as follows:

Public Company Eligible Dividends	\$23,000
Gross Up [(38%)(23,000)]	8,740
Non-Eligible Dividends - Private Company	15,000
Gross Up [(18%)(15,000)]	2,700
Foreign Preferred Shares Dividends [(100%)(US\$1,800)(C\$1.25)]	2,250
Gross Up	N/A
Mutual Fund Eligible Dividends	9,000
Gross Up [(38%)(9,000)]	3,420
Mutual Fund Interest Income	5,250
<u>Less Interest On Loan For Investments [(2.5%)(200,000)(3/12)]</u>	<u>( 1,250)</u>
<u>Net Property Income</u>	<u>\$68,110</u>

The interest on the home mortgage taken out to purchase the house is not deductible as the funds were not used to produce income. However, when the original loan was repaid and the house remortgaged, the direct use of the funds was to produce income from investments. As a result, the interest is deductible.

**Taxable Capital Gains**

Christopher has taxable capital gains from the mutual fund distribution as follows:

Mutual Fund Taxable Capital Gains [(1/2)(\$20,000)]	\$10,000
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**Net And Taxable Income**

**Christopher** Christopher's Net Income For Tax Purposes and Taxable Income can be calculated as follows:

Net Employment Income	\$ 60,980
Net Property Income	68,110
Taxable Capital Gains	10,000
Net Income For Tax Purposes	\$139,090
Deductions	Nil
Taxable Income - Christopher	\$139,090

**Kathy** Kathy's Net Income For Tax Purposes and Taxable Income would simply be the \$8,200 that was given in the problem.

**Base Tax Payable**

**Christopher** Christopher's Base Tax Payable would be calculated as follows:

Tax On First \$138,586	\$29,327
Tax On Next \$504 (\$139,090 - \$138,586) At 29 Percent	146
Tax Before Credits	\$29,473
Personal Non-Refundable Credits:	
Basic Personal Amount	(\$11,327)
Spousal (\$11,327 - \$8,200)	( 3,127)
Volunteer Firefighters	( 3,000)
First Time Home Buyers	( 5,000)
Child Fitness - Lesser Of:	
Actual Costs = \$1,800	
Annual Limit = \$1,000	( 1,000)
Public Transit Pass [(8)(\$100)]	( 800)
Caregiver For Jason (Includes FCA)	( 6,701)
Medical Expenses (Note 3)	( 21,547)
EI Premiums	( 931)
CPP Contributions	( 2,480)
Canada Employment	( 1,146)
Credit Base For Personal Credits	(\$57,059)
Rate	15%
	(\$ 8,559)
Charitable Donations (Canadian Cancer Society)	
[(15%)(200) + (29%)(3,200 - 200)]	( 900)
Dividend Tax Credits:	
Eligible Dividends [(6/11)(38%)(23,000 + 9,000)]	( 6,633)
Non-Eligible Dividends [(13/18)(18%)(15,000)]	( 1,950)
Foreign Tax Credit [(10%)(US\$1,800)(C\$1.25)]	( 225)
Christopher's Base Tax Payable	\$11,206

**Note 3** The base amount for medical expenses would be calculated as follows:

Christopher, Kathy, and Mark (\$1,525 + \$1,342 + \$2,450)	\$	5,317
Reduced By The Lesser Of:		
• [(3%)(\$139,090)] = \$4,173		
• 2015 Threshold Amount = \$2,208	(	2,208)
Jason's Medical Expenses		
(\$12,000 + \$3,300 + \$3,420)	\$18,720	
Reduced By The Lesser Of:		
• [(3%)(\$9,400)] = \$282		
• \$2,208	(	282)
		18,438
Allowable Medical Costs		\$21,547

The home modifications were made to allow Jason, who is confined to a wheelchair, to be more mobile within the home. As a result, the costs are allowable medical costs. If the renovations had been done in 2016, they would also be eligible for the Home Accessibility Tax Credit proposed in the 2015 Budget.

The fees for hair replacement and teeth whitening are not allowable medical costs.

### ***Kathy's Base Tax Payable***

Kathy's Base Tax Payable would be calculated as follows:

Tax Before Credits [(15%)(\$8,200)]	\$1,230
Basic Personal Credit [(15%)(\$11,327)]	( 1,699)
Kathy's Base Tax Payable	Nil

### ***Combined Base Tax Payable***

The combined Base Tax Payable for Christopher and Kathy would be \$11,206 (\$11,206 + Nil).

## **Part B**

### ***The Required Transfer***

In calculating the combined Adjusted Base Tax Payable, the required transfer would be the lesser of \$50,000 and \$65,445 [(\$139,090 - \$8,200) ÷ 2]. Transferring the lesser amount of \$50,000 will leave the following:

Adjusted Taxable Income - Christopher (\$139,090 - \$50,000)	\$89,090
Adjusted Taxable Income - Kathy (\$8,200 + \$50,000)	\$58,200

### ***Adjusted Base Tax Payable***

**Kathy** Kathy's Adjusted Base Tax Payable would be calculated as follows:

Tax On First \$44,701	\$6,705
Tax On Next \$13,499 (\$58,200 - \$44,701) At 22 Percent	2,970
Tax Payable Before Credit	\$9,675
Basic Personal Credit [(15%)(\$11,327)]	( 1,699)
Kathy's Adjusted Base Tax Payable	\$7,976

**Christopher** Christopher's Adjusted Base Tax Payable would be calculated as follows:

Tax On First \$44,701		\$ 6,705
Tax On Next \$44,389 (\$89,090 - \$44,701) At 22 Percent		9,766
<hr/>		
Tax Before Credits		\$16,471
Personal Non-Refundable Credits:		
Basic Personal Amount	(\$11,327)	
Spousal (\$11,327 - \$8,200)	( 3,127)	
Volunteer Firefighters	( 3,000)	
First Time Home Buyers	( 5,000)	
Child Fitness - Lesser Of:		
Actual Costs = \$1,800		
Annual Limit = \$1,000	( 1,000)	
Public Transit Pass [(8)(\$100)]	( 800)	
Caregiver For Jason (Includes FCA)	( 6,701)	
Medical Expenses (Note 3)	( 21,547)	
EI Premiums	( 931)	
CPP Contributions	( 2,480)	
Canada Employment	( 1,146)	
<hr/>		
Credit Base Before Spousal Adjustment	(\$57,059)	
Spousal Adjustment (\$11,327 - \$8,200)	3,127	
<hr/>		
Credit Base	(\$53,932)	
Rate	15%	( 8,090)
Charitable Donations		
[(15%)(200) + (29%)(3,200 - 200)]		( 900)
Dividend Tax Credits		
[(6/11)(38%)(23,000 + 9,000)]		( 6,633)
Non-Eligible Dividends [(13/18)(18%)(15,000)]		( 1,950)
Foreign Tax Credit [(10%)(US\$1,800)(C\$1.25)]		( 225)
<hr/>		
Christopher's Adjusted Base Tax Payable		Nil
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Note that the non-refundable credits claimed here are the same as those used in the determination of Christopher's Base Tax Payable (we have not duplicated the calculations here, but simply referred to the notes that were provided with the Base Tax Payable calculation). The only difference is the spousal adjustment which removes the spousal credit amount.

**Combined Adjusted Base Tax Payable**

The combined Adjusted Base Tax Payable would total \$7,976 (\$7,976 + Nil).

**Part C**

The Family Tax Cut for Christopher and Kathy would be the lesser of \$2,000 and \$3,230 (\$11,206 - \$7,976). The lesser figure is \$2,000.

**Part D**

The combined Tax Payable for Christopher and Kathy, after the application of the Family Tax Cut would be calculated as follows:

Christopher's Tax Payable Before The Family Tax Cut (Same As Base Tax Payable)		\$11,206
Family Tax Cut Claimed By Christopher (Maximum)	( 2,000)	
Kathy's Tax Payable (Same As Base Tax Payable)		Nil
<hr/>		
Combined Tax Payable After The Family Tax Cut		\$ 9,206
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## Solution to Assignment Problem Seven - 9

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### Employment Income

Jeremy's net employment income would be calculated as follows:

Gross Wages	\$74,000
RPP Contributions	( 5,600)
Union Dues	( 896)
<b>Net Employment Income</b>	<b>\$67,504</b>

### Property Income

Jack's property income would be calculated as follows:

Eligible Dividends Received	\$8,600
Gross Up Of Eligible Dividends (38%)	3,268
Non-Eligible Dividends Received	6,400
Gross Up Of Non-Eligible Dividends (18%)	1,152
Foreign Dividends Before Withholding (\$13,600 ÷ 85%)	16,000
Interest	3,420
<b>Property Income</b>	<b>\$38,840</b>

### Net Business Income

Jack's net business income would be calculated as follows:

Net Cash Flow	\$187,000
Principal Payments On Car Loan (\$14,400 - \$5,100)	9,300
Non-Deductible Interest [(\$5,100 - (365)(\$10 Daily Maximum)]	1,450
December 31 Receivables	26,700
January 1 Billed Receivables	( 23,200)
December 31 Work In Process (Note 1)	31,300
January 1 Work In Process	( 28,900)
December 31 Accounts Payable	( 14,200)
January 1 Accounts Payable	15,600
Subtotal	\$205,050
CCA (\$22,430 + \$4,493 + \$4,500) (Note 2)	( 31,423)
Car Operating Costs (Already Deducted)	Nil
<b>Net Business Income</b>	<b>\$173,627</b>

**Note 1** Since the business involves management consulting, Jeremy cannot use the "billed basis of income recognition". As a result, he must include unbilled work in progress in his income.

**Note 2** The CCA would be calculated as follows:

#### Class 1 CCA

January 1, 2015 UCC	\$342,837
Additions (Improvements)	62,000
One-Half Net Additions	( 31,000)
Base For CCA	\$373,837
Rate	6%
<b>CCA</b>	<b>\$ 22,430</b>

As the building was acquired new and was used 100 percent for non-residential purposes, it is eligible for the 6 percent CCA rate. The fact that it was the only building owned by the business would result in it automatically being allocated to a separate class, but it must remain in a separate Class 1 to continue to qualify for the 6 percent rate.

**Class 8 CCA**

January 1, 2015 UCC	\$10,564
Additions	47,000
Disposals - Lesser Of:	
• Proceeds Of Disposition = \$23,200	
• Capital Cost = \$25,000	( 23,200)
One-Half Net Additions [(1/2)(\$47,000 - \$23,200)]	( 11,900)
Base For CCA	\$22,464
Rate	20%
CCA	\$ 4,493

**Class 10.1 CCA**

As the cost of the car exceeds \$30,000, the addition to Class 10.1 is limited to this value. The maximum deduction for 2015 would be \$4,500 [(30%)(1/2)(\$30,000)].

**Net Income For Tax Purposes And Taxable Income**

There are no Taxable Income deductions available. As a consequence, Taxable Income is equal to Net Income For Tax Purposes.

Net Employment Income	\$ 67,504
Property Income	38,840
Net Business Income	173,627
Pension Income	32,500
Net Income For Tax Purposes And Taxable Income	\$312,471

**Tax Payable**

Tax Payable would be calculated as follows:

Tax On First \$138,586		\$29,327
Tax On Next \$173,885 (\$312,471 - \$138,586) At 29 Percent		50,427
<hr/>		
Tax Before Credits		\$79,754
Tax Credits:		
Basic Personal Amount (Jeremy)	(\$11,327)	
Spouse (\$11,327 - \$8,400)	( 2,927)	
Caregiver Including Family Caregiver Amount - Sarah	( 6,701)	
Jeremy's Age Credit [\$7,033 - (15%)(312,471 - 35,466)]	Nil	
Jeremy's Pension Credit	( 2,000)	
EI	( 931)	
CPP	( 2,480)	
Canada Employment	( 1,146)	
Transfer Of Spouse's Age Credit		
[\$7,033 - (15%)(8,400 - 35,466)]	( 7,033)	
Transfer Of Spouse's Pension Credit	( 2,000)	
Transfer Of Sarah's Disability Credit	( 7,899)	
Transfer Of Samantha's Education Credits (Note 5)	( 5,000)	
Medical Expenses (Note 6)	( 14,692)	
<hr/>		
Total Credit Base	(\$64,136)	
Rate	15%	( 9,620)
Charitable Donations (to United Way)		
[(15%)(200) + (29%)(2,400 - 200)]		( 668)
Dividend Tax Credit On:		
Eligible Dividends [(6/11)(\$3,268)]		( 1,783)
Non-Eligible Dividends [(13/18)(\$1,152)]		( 832)
Foreign Tax Credit - Amount Withheld [(15%)(16,000)]		( 2,400)
<hr/>		
Federal Tax Payable		\$64,451
<hr/>		

**Note 5** Samantha's child support received is not included in her Net Income For Tax Purposes. Given this, Samantha has Net Income For Tax Purposes of nil and would qualify as a dependant of Jeremy's. Even though she lives with Jeremy, he cannot claim the caregiver tax credit for her as she is not mentally or physically infirm.

Samantha's total education credits are \$18,260 [\$16,400 + (4)(\$400) + (4)(\$65)], well in excess of the maximum transfer of \$5,000. The maximum transfer of education related amounts to Jeremy is \$5,000.

**Note 6** The claim for medical expenses is determined as follows:

Medical Expenses Of Jeremy And Sandra (\$4,000 + \$1,700)		\$ 5,700
Reduced By The Lesser Of:		
• [(3%)(312,471)] = \$9,374		
• 2015 Threshold Amount = \$2,208		( 2,208)
<hr/>		
Balance Before Dependants 18 And Over		\$ 3,492
Sarah's Medical Expenses	\$9,400	
Reduced By The Lesser Of:		
• \$2,208		
• [(3%)(Nil)] = Nil	Nil	9,400
<hr/>		
Samantha's Medical Expenses	\$ 1,800	
Reduced By The Lesser Of:		
• \$2,208		
• [(3%)(Nil)] = Nil	Nil	1,800
<hr/>		
Total Medical Expense Claim		\$14,692
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## CHAPTER EIGHT SOLUTIONS

### Solution to Assignment Problem Eight - 1

#### Part A

The average cost of the shares sold during June, 2015 would be calculated as follows:

January, 2011 Purchase [(1,250)(\$24)]	\$30,000
November, 2013 Purchase [(860)(\$29)]	24,940
<b>Total Cost</b>	<b>\$54,940</b>
<hr/>	
Average Cost [ $\$54,940 \div (1,250 + 860)$ ]	\$26.04

Given this average cost, the taxable capital gain on the June, 2015 sale of shares would be calculated as follows:

Proceeds [(1,750)(\$31)]	\$54,250
Cost [(1,750)(\$26.04)]	( 45,570)
<b>Capital Gain</b>	<b>\$8,680</b>
<b>Inclusion Rate</b>	<b>1/2</b>
<b>Taxable Capital Gain</b>	<b>\$4,340</b>

#### Part B

The total cost of the 1,580 shares remaining on December 31, 2015 would be \$14,063.65. This is calculated in the following table:

Acquisition Or Sale Date	Shares Purchased (Sold)	Cost Per Share	Total Cost	Average Cost/Share
March 2011 Purchase	960	\$ 7.50	\$ 7,200.00	
September, 2012 Purchase	1,230	8.75	10,762.50	
February, 2013 Purchase	620	9.20	5,704.00	
<b>Subtotal</b>	<b>2,810</b>		<b>\$23,666.50</b>	<b>\$8.42</b>
July, 2013 Sale	( 980)	\$ 8.42	( 8,251.60)	
March, 2014 Purchase	375	11.23	4,211.25	
<b>Subtotal</b>	<b>2,205</b>		<b>\$19,626.15</b>	<b>\$8.90</b>
April, 2015 Sale	( 625)	\$ 8.90	( 5,562.50)	
<b>December 31, 2015 Balances</b>	<b>1,580</b>		<b>\$14,063.65</b>	

The taxable capital gain resulting from the 2013 sale would be calculated as follows:

Proceeds Of Disposition [(980)(\$10.15)]	\$9,947.00
Adjusted Cost Base [(980)(\$8.42)]	( 8,251.60)
<b>Capital Gain</b>	<b>\$1,695.40</b>
<b>Inclusion Rate</b>	<b>1/2</b>
<b>Taxable Capital Gain</b>	<b>\$ 847.70</b>

The allowable capital loss resulting from the 2015 sale would be calculated as follows:

Proceeds Of Disposition [(625)(\$8.10)]	\$5,062.50
Adjusted Cost Base [(625)(\$8.90)]	( 5,562.50)
<b>Capital Loss</b>	<b>(\$ 500.00)</b>
<b>Inclusion Rate</b>	<b>1/2</b>
<b>Allowable Capital Loss</b>	<b>(\$ 250.00)</b>

## Solution to Assignment Problem Eight - 2

### Basic Alternatives

The basic issue here is whether the profit resulting from the sale is business income or, alternatively, a capital gain. The basic criteria in making this distinction is the intent of the taxpayer at the time the asset is acquired. Was it being acquired to produce income or, alternatively, was it being acquired for resale at a profit? Additional criteria (most of which are relevant to this solution) that can be used in determining intent are as follows:

- length of ownership period
- number and/or frequency of such transactions
- relationship to the taxpayer's business
- supplemental work on the property
- nature of the asset
- objectives stated in the articles of incorporation

### Business Income Approach

CL did no work on the land, did not receive income from the land, and the length of the ownership period was relatively short. Casper also informed the property manager of the industrial park that he might be interested in selling some of the land.

This would suggest business income treatment. Also supporting this view is the fact that Casper believed, at the time of purchase, that the land could be resold at a profit. The addition to Net Income For Tax Purposes in 2015 resulting from business income treatment would be as follows:

Proceeds Of Disposition	\$4,300,000
Cost [(\$11,800,000)(10 ÷ 40)]	( 2,950,000)
<u>Addition To Net Income For Tax Purposes</u>	<u>\$1,350,000</u>

The reserve available under ITA 20(1)(n) is only available on business income, i.e., property sold during the ordinary course of business. Since CL provides moving services and does not sell land as its business, the company would not be eligible for this reserve. Business income reserves are covered in Chapter 6.

### Capital Gains Approach

The fact that the original intent was to move the company's operation to this site would suggest capital gains treatment. In addition, the offer was unsolicited, the land sale appears to be the only one that CL has made and CL's business is not land development or real estate.

It would appear that the arguments for capital gains treatment are stronger than those for business income treatment. However, this situation could change if CL sells more pieces of land in the near future as that would make this sale one of several and more indicative of business income.

The minimum addition to Net Income For Tax Purposes in 2015 resulting from capital gains treatment would be as follows:

Proceeds Of Disposition	\$4,300,000
Adjusted Cost Base [(\$11,800,000)(10 ÷ 40)]	( 2,950,000)
<u>Total Capital Gain</u>	<u>\$1,350,000</u>
Less Reserve - Lesser Of:	
• [(\$1,350,000)(2,800,000 ÷ 4,300,000)] = \$879,070	
• [(\$1,350,000)(20%)(4 - 0)] = \$1,080,000	( 879,070)
<u>Capital Gain</u>	<u>\$ 470,930</u>
Inclusion Rate	1/2
<u>Addition To Net Income For Tax Purposes</u>	<u>\$ 235,465</u>

While additional income would have to be recognized in 2016 to 2019 under this approach, the total amount would only be \$675,000, one-half of the amount to be recognized under the business income approach. In addition, the capital gains approach provides significant tax deferral through the use of a capital gains reserve.

## Solution to Assignment Problem Eight - 3

### Capital Gains Reserve

With respect to the capital gains, under ITA 40(1)(a)(iii), the amount that can be deducted as a capital gains reserve is equal to the lesser of:

- $[(\text{Capital Gain})(\text{Proceeds Not Yet Due} \div \text{Total Proceeds})]$
- $[(\text{Capital Gain})(20\%)(4 - \text{Number Of Preceding Years Ending After Disposition})]$

### 2015 Results

The only tax consequence in this year is the capital gain that occurs on the sale. The gain, along with the maximum deductible reserve, would be calculated as follows:

Proceeds Of Disposition	\$6,680,000
Adjusted Cost Base	( 2,160,000)
Capital Gain	\$4,520,000
Reserve - Lesser Of:	
• $[(\$4,520,000)(\$4,500,000 \div \$6,680,000)] = \$3,044,910$	
• $[(\$4,520,000)(20\%)(4 - 0)] = \$3,616,000$	( 3,044,910)
Capital Gain	\$1,475,090
Inclusion Rate	1/2
Taxable Capital Gain	\$ 737,545

As no provision can be made for the estimated cost of the warranty, the total Net Income For Tax Purposes inclusion for 2015 would be \$737,545.

### 2016 Results

For this year, the reserve would be the lesser of:

- $[(\$4,520,000)(\$3,000,000 \div \$6,680,000)] = \$2,029,940$
- $[(\$4,520,000)(20\%)(4 - 1)] = \$2,712,000$

Based on this, the total inclusion in Net Income For Tax Purposes for 2016 would be as follows:

2015 Reserve Added To Income	\$3,044,910
2016 Reserve	( 2,029,940)
Capital Gain	\$1,014,970
Inclusion Rate	1/2
Taxable Capital Gain	\$ 507,485
Interest $[(4\%)(\$4,500,000)]$	180,000
Total	\$ 687,485

### 2017 Results

For this year, the reserve would be the lesser of:

- $[(\$4,520,000)(\$1,500,000 \div \$6,680,000)] = \$1,014,970$
- $[(\$4,520,000)(20\%)(4 - 2)] = \$1,808,000$

He will have a capital gain consisting of the addition of the 2016 reserve in income and the deduction of a new reserve for 2017. He will also have a capital loss due to the \$1,000,000 payment to the developer. As this payment is required by a warranty on a capital asset, it is a capital loss.

Based on this, the total inclusion in Net Income For Tax Purposes for 2017 would be as follows:

2016 Reserve Added To Income	\$2,029,940
2017 Reserve	( 1,014,970)
Capital Gain	\$1,014,970
Capital Loss On Warranty Payment On Capital Asset	( 1,000,000)
Net Capital Gain	\$ 14,970
Inclusion Rate	1/2
Net Taxable Capital Gain	\$ 7,485
Interest [(4%)(\$3,000,000)]	120,000
Total	\$ 127,485

**2018 Results**

With the bankruptcy of the developer, no interest will be collected in 2018 and the balance of the loan must be written off as a bad debt, resulting in a capital loss of \$1,500,000 [(Nil - (\$4,500,000 - \$3,000,000))].

Lawrence will include the 2017 reserve of \$1,014,970 in income. Since the loan was to be paid off in 2018, there would have been no new reserve to be deducted, regardless of the bankruptcy.

The capital loss can be deducted to the extent of the capital gain of \$1,014,970. The remaining allowable capital loss of \$242,515 [(1/2)(\$1,500,000 - \$1,014,970)] can only be deducted in 2018 to the extent of taxable capital gains in that year. However, it can be carried back to be applied to the capital gains that were recognized in previous years.

**Summary (Not Required)**

The results can be summarized as follows:

Year	Interest	Net Taxable Gain (Allowable Loss)
2015	Nil	\$737,545
2016	\$180,000	507,485
2017	120,000	7,485
2018	Nil	( 242,515)
Totals	\$300,000	\$1,010,000

The amount of the taxable capital gain can be verified as follows:

Initial Capital Gain	\$4,520,000
Warranty Payment	( 1,000,000)
Bad Debt	( 1,500,000)
Capital Gain	\$2,020,000
Inclusion Rate	1/2
Taxable Capital Gain	\$1,010,000

## Solution to Assignment Problem Eight - 4

### Capital Gain And Recapture

The immediate tax consequences of the sale can be calculated as follows:

	Land	Building	Total Gain
Proceeds Of Disposition	\$300,000	\$1,200,000	
Adjusted Cost Base/Capital Cost	( 250,000)	( 950,000)	
Capital Gain	\$ 50,000	\$ 250,000	\$300,000

	Building
Opening UCC Balance Of Class 1	\$790,742
Lesser Of:	
• Proceeds Of Disposition = \$1,200,000	
• Capital Cost = \$950,000	( 950,000)
Negative Ending Balance = Recapture Of CCA	(\$159,258)

### Part A - Down Payment = 10 Percent

#### 2015 Results

The \$159,258 of recapture must be included in income in this year.

With a down payment of \$150,000 [(10%)(\$1,500,000)], interest must be accrued on the outstanding balance of \$1,350,000 (\$1,500,000 - \$150,000). At 6 percent, the amount would be \$81,000.

With respect to the capital gains, under ITA 40(1)(a)(iii), the amount that can be deducted as a capital gains reserve is equal to the lesser of:

- [(Capital Gain)(Proceeds Not Yet Due ÷ Total Proceeds)]
- [(Capital Gain)(20%)(4 - Number Of Preceding Years Ending After Disposition)]

While the gains on the land and building must be calculated separately, there is no reason to separate them for the purposes of determining the available reserve. This is based on the fact that, in the absence of some reason to apply it differently, the 10 percent down payment would apply equally to each component of the sale.

With a down payment of \$150,000, the available reserve would be the lesser of:

- [(\$300,000)(\$1,350,000 ÷ \$1,500,000)] = \$270,000
- [(\$300,000)(20%)(4 - 0)] = \$240,000

Using the lesser figure of \$240,000, the taxable capital gain to be included in Net Income For Tax Purposes would be \$30,000 [(1/2)(\$300,000 - \$240,000)]. The total inclusion in Net Income For Tax Purposes for 2015 would be as follows:

Recapture	\$159,258
Interest	81,000
Taxable Capital Gain	30,000
Total For 2015	\$270,258

#### 2016 Results

For this year, the reserve would be the lesser of:

- [(\$300,000)(\$1,350,000 ÷ \$1,500,000)] = \$270,000
- [(\$300,000)(20%)(4 - 1)] = \$180,000

Based on this, the total inclusion in Net Income For Tax Purposes for 2016 would be as follows:

2015 Reserve Added To Income	\$240,000
2016 Reserve	( 180,000)
Net Capital Gain	\$ 60,000
Inclusion Rate	1/2
Net Taxable Capital Gain	\$ 30,000
Interest (Same As 2015)	81,000
Total For 2016	\$111,000

**2017 Results**

For this year, the reserve would be the lesser of:

- $[(\$300,000)(\text{Nil} \div \$1,500,000)] = \text{Nil}$
- $[(\$300,000)(20\%)(4 - 2)] = \$120,000$

Based on this, the total inclusion in Net Income For Tax Purposes for 2017 would be as follows:

2016 Reserve Added To Income	\$180,000
2017 Reserve	Nil
Net Capital Gain	\$180,000
Inclusion Rate	1/2
Net Taxable Capital Gain	\$ 90,000
Interest	Nil
Total For 2017	\$ 90,000

**Part B - Down Payment = 30 Percent**

**2015 Results**

While the down payment is changed in this case, the amount of recapture would be the same as in Part A. However, the interest would be reduced to \$63,000  $[(6\%)(\$1,500,000 - \$450,000)]$ .

With the down payment of \$450,000  $[(30\%)(\$1,500,000)]$ , the available reserve would be the lesser of:

- $[(\$300,000)(\$1,050,000 \div \$1,500,000)] = \$210,000$
- $[(\$300,000)(20\%)(4 - 0)] = \$240,000$

Using the lesser figure of \$210,000, the taxable capital gain to be included in Net Income For Tax Purposes would be \$45,000  $[(1/2)(\$300,000 - \$210,000)]$ .

The total inclusion in Net Income For Tax Purposes for 2015 would be as follows:

Recapture	\$159,258
Interest	63,000
Taxable Capital Gain	45,000
Total For 2015	\$267,258

**2016 Results**

For this year, the reserve would be the lesser of:

- $[(\$300,000)(\$1,050,000 \div \$1,500,000)] = \$210,000$
- $[(\$300,000)(20\%)(4 - 1)] = \$180,000$

Based on this, the total inclusion in Net Income For Tax Purposes for 2016 would be as follows:

2015 Reserve Added To Income	\$210,000
2016 Reserve	( 180,000)
Net Capital Gain	\$ 30,000
Inclusion Rate	1/2
Net Taxable Capital Gain	\$ 15,000
Interest (Same As 2015)	63,000
Total For 2016	\$ 78,000

**2017 Results**

For this year, the results are the same as in Part A. The reserve would be the lesser of:

- [(\$300,000)(Nil ÷ \$1,500,000)] = Nil
- [(\$300,000)(20%)(4 - 2)] = \$120,000

Based on this, the total inclusion in Net Income For Tax Purposes for 2017 would be as follows:

2016 Reserve Added To Income	\$180,000
2017 Reserve	Nil
Net Capital Gain	\$180,000
Inclusion Rate	1/2
Net Taxable Capital Gain	\$ 90,000
Interest	Nil
Total For 2017	\$ 90,000

## Solution to Assignment Problem Eight - 5

### Capital Gain

The taxable capital gain on the disposition would be calculated as follows:

Proceeds Of Disposition	\$895,000
Adjusted Cost Base	( 135,000)
Selling Costs [(4%)(\\$895,000)]	( 35,800)
Capital Gain	\$724,200
Inclusion Rate	1/2
Taxable Capital Gain	\$362,100

### Reserve Limits

Under ITA 40(1)(a)(iii), the amount that can be deducted as a capital gains reserve is equal to the lesser of:

- [(Capital Gain)(Proceeds Not Yet Due ÷ Total Proceeds)]
- [(Capital Gain)(20%)(4 - Number Of Preceding Years Ending After Disposition)]

The second part of this formula serves to require that at least 20 percent of the gain be recognized in the year of disposition and each subsequent year, without regard to the pattern of cash collected.

### Part A

The reserve percentage under the two components of ITA 40(1)(a)(iii) would be as follows:

Year	Proceeds Not Yet Due	20 Percent Formula
2015	90%	80%
2016	80%	60%
2017	70%	40%
2018	60%	20%
2019	50%	Nil

In this case, the formula calculation provides the lowest figure in each of the 5 years. Using this as the basis for the reserve will result in the recognition of \$144,840 [(20%)(\\$724,200)] of the gain in each of the five years. The taxable amount in each year will be \$72,420, for a total of \$362,100 over the five years 2015 through 2019.

### Part B

In this case, the reserve percentage components would be as follows:

Year	Proceeds Not Yet Due	20 Percent Formula
2015	50%	80%
2016	40%	60%
2017	30%	40%
2018	20%	20%
2019	10%	Nil

For the years 2015 through 2017, the proceeds not yet due calculation provides the lowest figure. Based on this, the minimum reserve for the three years would be calculated as follows:

- 2015 [(\\$724,200)(50%)] = \$362,100
- 2016 [(\\$724,200)(40%)] = \$289,680
- 2017 [(\\$724,200)(30%)] = \$217,260

	2015	2016	2017
Capital Gain	\$724,200	N/A	N/A
Previous Year's Reserve		\$362,100	\$289,680
New Reserve	( 362,100)	( 289,680)	( 217,260)
Capital Gain	\$362,100	\$ 72,420	\$72,420
Inclusion Rate	1/2	1/2	1/2
Taxable Capital Gain	\$181,050	\$ 36,210	\$36,210

For the year 2018, both components of the ITA 40(1)(a)(iii) have the same percentage.

2017 Reserve	\$217,260
2018 Reserve [(\$724,200)(20%)]	( 144,840)
Capital Gain	\$ 72,420
Inclusion Rate	1/2
Taxable Capital Gain For 2018	\$ 36,210

For the year 2019, the 20 percent formula provides the lower percentage.

2018 Reserve	\$144,840
2019 Reserve [(\$724,200)(0%)]	Nil
Capital Gain	\$144,840
Inclusion Rate	1/2
Taxable Capital Gain For 2019	\$ 72,420

As shown in the following table, at this point the entire \$362,100 taxable capital gain has been recognized:

Year	Gain Recognized
2015	\$181,050
2016	36,210
2017	36,210
2018	36,210
2019	72,420
Total	\$362,100

## Solution to Assignment Problem Eight - 6

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1. The described treatment is not correct. While Mr. Acker has not sold any property, a part of his building has undergone a change in use from a rental property to a personal use property. As a consequence, there will be a deemed disposition at fair market value for that portion of the building that he is occupying. Any resulting capital gain or loss will have to be reflected in his current tax return. If he had not taken CCA on the property, he could have filed an election to postpone the recognition of the capital gain until he sells the property.
2. This interpretation is not correct. No recognition can be given to the estimated cost of the warranty prior to the provision of the warranty services. As a consequence, a capital gain of \$33,000 will have to be recognized. However, when the warranty services are provided, the costs of providing the services can be treated as capital losses.
3. The described treatment is correct. Losses on the sale of personal use property such as the table are not deductible. The gain on the painting is not taxable as both the adjusted cost base and the proceeds are less than \$1,000.
4. The described treatment is the appropriate one.

Proceeds Of Disposition (\$11,600 - \$200)	\$11,400
Adjusted Cost Base (\$11,200 - \$800)	( 10,400)
Capital Gain	\$ 1,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 500

5. The described treatment is the appropriate one.

## Solution to Assignment Problem Eight - 7

As the ownership period varies for the two properties, the total gains must be converted to annual amounts. The Kelowna home was owned for 20 years (1996 through 2015) and the Ottawa home was owned for 12 years (2004 through 2015).

Given this, the annual gains are as follows:

	<b>Kelowna Home</b>	<b>Ottawa Home</b>
Proceeds Of Disposition	\$897,000	\$534,000
Adjusted Cost Base	( 623,000)	( 426,000)
Total Capital Gain	\$274,000	\$108,000
Divided By Years Owned	20	12
Annual Gains	\$ 13,700	\$ 9,000

As the annual gain is larger on the Kelowna home, qualifying years should be designated to that property first. Because of the plus one in the exemption formula, it will only take 19 years to completely eliminate the gain on this property. This leaves 1 year to be designated to the Ottawa home.

The required calculations would be as follows:

	<b>Kelowna Home</b>	<b>Ottawa Home</b>
Total Capital Gain	\$274,000	\$108,000
Exemption:		
Kelowna Home (1996 to 2014)		
{[\$274,000][(19 + 1) ÷ 20]}	( 274,000)	
Ottawa Home (2015)		
{[\$108,000][(1 + 1) ÷ 12]}		( 18,000)
Capital Gain	Nil	\$ 90,000
Inclusion Rate	N/A	1/2
Taxable Capital Gain	Nil	\$ 45,000

This gives a total taxable capital gain on the two properties of \$45,000.

## Solution to Assignment Problem Eight - 8

### Classification Of Property

All of the items sold are personal use property. However, if they can be classified as "listed personal property", their tax treatment will be different. Under ITA 54, listed personal property consists of the following items.

- (i) print, etching, drawing, painting, sculpture, or other similar work of art,
- (ii) jewelry,
- (iii) rare folio, rare manuscript, or rare book,
- (iv) stamp, or
- (v) coin.

The Paul Borduas painting, as well as the Hemingway first edition clearly fall into the listed personal property classification. The Bentley and the Chris Craft clearly do not.

The classification of the fountain pen collection is not clear. The issue is whether a pen can be considered jewelry (and not a writing implement) as there are fountain pens that cost as much as \$100,000 and are made from precious metals and stones.

The dictionary definition of jewel includes "a precious possession". However, the definition of jewelry is more narrow, referring to "ornaments for personal adornment". Whether something that is displayed on one's desk would be considered personal adornment would be debatable, but the fact that Mr. Howard always "wears" the pens prominently would favour the jewelry classification.

In the solution which follows, we have classified the pens as jewelry. However, we recognize that this classification could be subject to challenge.

### Effect On Net Income For Tax Purposes

The overall amount to be included in Net Income For Tax Purposes can be calculated as follows:

<b>Personal Use Property</b>		
Gain On Antique Boat (\$62,000 - \$45,000)	\$17,000	
Loss On Bentley (Note 1)	<u>Nil</u>	\$17,000
<b>Listed Personal Property</b>		
Gain On First Edition (\$31,000 - \$12,000)	\$19,000	
Gain On Painting (\$132,000 - \$128,000)	<u>4,000</u>	
Total Listed Personal Property Gains	\$23,000	
Loss On Pens (Note 2)	<u>( 23,000)</u>	Nil
Net Capital Gains		\$17,000
Inclusion Rate		<u>1/2</u>
Addition To Net Income For Tax Purposes		<u>\$ 8,500</u>

**Note 1** Unless an item of personal use property can be classified as listed personal property, losses on its disposition cannot be deducted. However, gains on such property are taxable, without regard to the classification.

**Note 2** The total loss on the pen collection is \$29,000 (\$13,000 - \$42,000). However, the current year deduction is limited to the \$23,000 in gains on listed personal property. The remaining \$6,000 (\$29,000 - \$23,000) can be carried back 3 years and forward 7 years to be applied against gains on listed personal property that have occurred in previous years or may occur in subsequent years.

## Solution to Assignment Problem Eight - 9

### 2013 Results

The purchase of shares with newly acquired Swiss Francs will have no effect on Net Income For Tax Purposes in this year.

### 2014 Results

The total dividend received is SF5,500 [(5,000)(SF1.10)]. This amount will be converted to \$6,325 [(SF5,500)(\$1.15)] and included in Mr. Franklin's 2014 Net Income For Tax Purposes. Since Matterhorn is not a taxable Canadian corporation, its dividends are not eligible for the gross up and tax credit procedures.

### 2015 Results

The taxable capital gain on the sale of securities would be calculated as follows:

	SF Amount	Rate	Translated
Proceeds Of Disposition [(5,000)(SF23)]	SF115,000	\$1.17	\$134,550
Adjusted Cost Base [(5,000)(SF25)]	(SF125,000)	\$1.14	( 142,500)
Capital Gain (Loss) On Sale Of Securities	(SF 10,000)		(\$ 7,950)
Inclusion Rate			1/2
Allowable Capital Loss			(\$ 3,975)

At the time of conversion, Mr. Franklin will have SF5,500 from the 2014 dividend, plus SF115,000 from the sale of shares, a total of SF120,500. A capital loss will result from their conversion, calculated as follows:

Proceeds Of Conversion [(SF120,500)(\$1.16)]		\$139,780
Adjusted Cost Base		
Dividend Proceeds [(SF5,500)(\$1.15)]	\$ 6,325	
Share Proceeds [(SF115,000)(\$1.17)]	134,550	( 140,875)
Capital Gain (Loss) On Foreign Exchange		(\$ 1,095)
ITA 39(1.1) Reduction Of Capital Loss		200
Net Capital Loss		(\$ 895)
Inclusion Rate		1/2
Allowable Capital Loss		(\$ 448)

The total allowable capital loss of \$4,423 (\$3,975 + \$448) can only be deducted in 2015 to the extent that Mr. Franklin has taxable capital gains in that year. If all or part of it cannot be currently used, the unused portion can be carried back 3 years and forward without limit, to be applied against taxable capital gains in those years.

Note that because Mr. Franklin is an individual, the ITA 39(1.1) deduction of \$200 reduces the capital loss on the foreign exchange conversion.

## Solution to Assignment Problem Eight - 10

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### 2013 Results

During 2013, 80 percent of the property is used for income producing purposes. Based on this the maximum CCA that can be deducted for this year is calculated as follows:

Capital Cost [(80%)(\\$500,000)]	\$400,000
One-Half Net Additions	( 200,000)
CCA Base	\$200,000
Maximum CCA [(4%)(\\$200,000)]	( 8,000)
One-Half Net Additions	200,000
UCC - January 1, 2014	\$392,000

There are no additional tax consequences during this year.

### 2014 Results - Business To Personal Use

On January 1, 2014, there would be a deemed disposition/acquisition of 20 percent of the total property. This would result in a taxable capital gain on the land calculated as follows:

Proceeds Of Disposition [(20%)(\\$230,000)]	\$46,000
Adjusted Cost Base [(20%)(\\$225,000)]	( 45,000)
Capital Gain	\$ 1,000
Inclusion Rate	1/2
Taxable Capital Gain On Land	\$ 500

There would also be taxable capital gain on the building, calculated as follows:

Proceeds Of Disposition [(20%)(\\$585,000)]	\$117,000
Adjusted Cost Base [(20%)(\\$500,000)]	( 100,000)
Capital Gain	\$ 17,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 8,500

The maximum CCA for 2014 would be calculated as follows:

Opening UCC	\$392,000
Disposition: Lesser Of:	
Capital Cost [(20%)(\\$500,000)] = \$100,000	
Proceeds Of Disposition	
[(20%)(\\$585,000) = \$117,000	( 100,000)
CCA Base	\$292,000
Maximum CCA [(4%)(\\$292,000)]	( 11,680)
UCC - January 1, 2015	\$280,320

**2015 Results - Personal To Business Use**

On January 1, 2015, there would be a deemed disposition/acquisition of 40 percent of the total property. This would result in a taxable capital gain on the land, calculated as follows:

Proceeds Of Disposition [(40%)(\\$245,000)]		\$98,000
Adjusted Cost Base:		
[(20%)(\\$225,000)]	(\$45,000)	
[(20%)(\\$230,000)]	( 46,000)	( 91,000)
Capital Gain		\$ 7,000
Inclusion Rate		1/2
Taxable Capital Gain On Land		\$ 3,500

There would also be a taxable capital gain on the building, calculated as follows:

Proceeds Of Disposition [(40%)(\\$630,000)]		\$252,000
Adjusted Cost Base:		
[(20%)(\\$500,000)]	(\$100,000)	
[(20%)(\\$585,000)]	( 117,000)	( 217,000)
Capital Gain		\$ 35,000
Inclusion Rate		1/2
Taxable Capital Gain		\$ 17,500

With respect to maximum CCA, this change in use involves a deemed disposition/acquisition from personal use to business use. In addition, the fair market value of the building is greater than her cost. Given this, the UCC will be limited to her cost plus one-half of the difference between fair market value and cost. This amount would be \$17,500, as calculated in the preceding table as the taxable capital gain.

Maximum CCA for would be calculated as follows:

Opening UCC		\$280,320
Deemed Acquisition Cost		
[(20%)(\\$500,000)]	\$100,000	
[(20%)(\\$585,000)]	117,000	
Bump Up	17,500	234,500
One-Half Net Additions		( 117,250)
CCA Base		\$397,570
Maximum CCA [(4%)(\\$397,570)]		( 15,903)
Add: One-Half Net Additions		117,250
UCC - January 1, 2016		\$498,917

**Note To Instructors**

We have asked students to ignore the principal residence exemption as the focus of the problem is on change in use. The textbook states that if there is non-residential use of a principal residence, the CRA will not apply the partial disposition rules so long as the income use is ancillary to the main use as a principal residence, there is no structural change to the property, and no CCA is claimed.

CCA was claimed on the 20 percent that went from business to principal residence back to business and the textbook does not specifically cover the effect of this CCA issue or a property where the principal residence portion is originally a small percentage of the total, on the principal residence exemption.

The fact that the business had claimed CCA on the 20 percent portion that was subsequently added to the personal portion when the business use dropped from 80 percent to 60 percent would not cause any adjustment to the principal residence. From a tax policy point of view a change from personal use to business use is a concern since the personal use disposition

results in capital gains with the added cost potentially being fully deductible as CCA. This is the reason why the change of use rules only allow half the increase in value to be added to cost. This issue does not arise, however when the property is converted from an income use to a personal use.

If the principal residence exemption was considered, when the 40 percent principal residence portion is changed to business use in 2015, that event would cause a disposition of a principal residence which would then be eligible for the principal residence exemption. As a result, there would be no net capital gain for 2015.

## Solution to Assignment Problem Eight - 11

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Ms. Doan's taxable capital gain on deemed dispositions resulting from her departure from Canada would be calculated as follows:

ABC Ltd. Shares (\$86,000 - \$42,000)	\$44,000
Vacant Land (Note 1)	N/A
Power Corporation Shares (\$72,000 - \$38,000)	34,000
TD Bank Shares (\$72,000 - \$84,000)	( 12,000)
Sailboat (Note 2)	N/A
Oil Painting (\$11,000 - \$5,000)	6,000
Stamp Collection (Note 3)	( 6,000)
<hr/>	
Capital Gain	\$66,000
Inclusion Rate	1/2
<hr/>	
Taxable Capital Gain On Departure	\$33,000
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**Note 1** Real property is exempted from the ITA 128.1(4)(b) deemed disposition requirement. However, as it is taxable Canadian property, a later sale of this land will attract Canadian income taxes, even though Ms. Doan is no longer a Canadian resident.

**Note 2** Losses on personal use property are not deductible.

**Note 3** Both the oil painting and the stamp collection are listed personal property. While there is a \$9,000 (\$12,000 - \$3,000) loss on the stamp collection, it can only be deducted to the extent of the \$6,000 gain on the oil painting. However, the remaining \$3,000 (\$9,000 - \$6,000) can be carried back three years and carried forward for up to seven years to be applied against any gains on listed personal property that might occur in those years.

## Solution to Assignment Problem Eight - 12

### First Sale

Since Ms. Tosh has held the Tech Ltd. common shares for more than 185 days, it is a qualifying disposition. Since the Small Oil common shares were purchased immediately, they can be designated as replacement shares.

Preferred shares cannot be designated as replacement shares. As a result, the Small Bank Inc. shares do not qualify as replacement shares.

The capital gain on the Tech Ltd. disposition is \$700,000 (\$4,200,000 - \$3,500,000). As the cost of replacement shares is only \$3,800,000, the permitted deferral is limited as per the following calculation:

$$[(\$700,000)(\$3,800,000 \div \$4,200,000)] = \$633,333 \text{ Deferral}$$

Given this, the adjusted cost base of the Small Oil shares would be calculated as follows:

Unadjusted Cost	\$3,800,000
Deferral Amount	( 633,333)
Adjusted Cost Base Of Small Oil Shares	\$3,166,667

### Second Sale

Since Ms. Tosh has held the Future Inc. common shares for more than 185 days, it is a qualifying disposition. Since the eligible small business corporation common shares were purchased in the current year, they can be designated as replacement shares.

The capital gain on the disposition of Future Inc. shares is \$1,800,000 (\$5,600,000 - \$3,800,000). Of the \$5,600,000 in proceeds, only \$5,200,000 (\$2,400,000 + \$2,800,000) was invested in replacement shares. This means that the permitted deferral will be limited as per the following calculation:

$$[(\$1,800,000)(\$5,200,000 \div \$5,600,000)] = \$1,671,429 \text{ Deferral}$$

Using this information, the adjusted cost base of the newly acquired shares would be calculated as follows:

	Sombra Shares	Ziff Shares
Purchase Price	\$2,400,000	\$2,800,000
Deferral:		
$[(\$1,671,429)(\$2,400,000 \div \$5,200,000)]$	( 771,429)	
$[(\$1,671,429)(\$2,800,000 \div \$5,200,000)]$		( 900,000)
Adjusted Cost Base	\$1,628,571	\$1,900,000

### Net Taxable Capital Gain

If Ms. Tosh does not purchase any other replacements shares within 120 days of December 31, 2015, the two sales would result in a taxable capital gain, calculated as follows:

	Total Gain	Deferral	Net Gain
Tech Ltd. Shares	\$ 700,000	\$ 633,333	\$ 66,667
Future Inc. Shares	1,800,000	1,671,429	128,571
Totals	\$2,500,000	\$2,304,762	\$195,238
Inclusion Rate			1/2
Net Taxable Capital Gain			\$ 97,619

**Advice**

If Ms. Tosh invests in any eligible small business corporation common shares, including her brother's company's, within 120 days of December 31, 2015, she can designate up to \$800,000 as replacement shares. She would then be able to defer more or all of the capital gain on the two sales of shares.

If she wants to invest in her brother's company after the 120 days has passed, she should review her other investments to determine if she can use the deferral provisions on small business investments to her advantage to obtain the \$1,000,000.

There is the question of whether Ms. Tosh should invest in her brother's new company, but that would involve an analysis that goes beyond the scope of the material in the text.

## Solution to Assignment Problem Eight - 13

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### Part A

The 2015 tax consequences would be as follows:

**Land** The Company would have a taxable capital gain on the Land calculated as follows:

Proceeds Of Disposition	\$1,500,000
Adjusted Cost Base	( 430,000)
Capital Gain	\$1,070,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 535,000

**Building** The Company would have a taxable capital gain and recapture calculated as follows:

Proceeds Of Disposition	\$3,300,000
Capital Cost	( 3,100,000)
Capital Gain	\$ 200,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 100,000

Opening UCC	\$1,286,690
Deduct Disposition - Lesser Of:	
Capital Cost = \$3,100,000	
Proceeds Of Disposition = \$3,300,000	( 3,100,000)
Negative Closing UCC Balance = Recapture	(\$1,813,310)
Recapture (Included In Income)	1,813,310
UCC - January 1, 2016	Nil

**Equipment** The Company would have recapture calculated as follows:

Opening UCC	\$285,371
Deduct Disposition - Lesser Of:	
Capital Cost = \$670,000	
Proceeds Of Disposition = \$523,000	( 523,000)
Negative Closing UCC Balance = Recapture	(\$237,629)
Recapture (Included In Income)	237,629
UCC - January 1, 2016	Nil

### Part B

**Land** With respect to the Land, the capital gain resulting from the use of the ITA 44(1) election would be the lesser of:

- \$1,070,000 (regular capital gain); and
- \$700,000 (the excess of the \$1,500,000 proceeds of disposition for the old land over the \$800,000 cost of the replacement land).

The taxable amount would be \$350,000 [(1/2)(\$700,000)] and this would be included in the revised 2015 Net Income For Tax Purposes.

If the ITA 44(1) election is used in 2016, the deemed adjusted cost base of the replacement land would be calculated as follows:

Actual Cost	\$800,000
Capital Gain Reversed By Election (\$1,070,000 - \$700,000)	( 370,000)
<u>Deemed Adjusted Cost Base Of Replacement Land</u>	<u>\$430,000</u>

Note that the deemed adjusted cost base of the replacement land has been reduced to the adjusted cost base of the old land.

**Building** If the ITA 44(1) election is used in 2016, the amended 2015 capital gain would be nil, the lesser of:

- \$200,000 (regular capital gain); and
- Nil (reflecting the fact that there was no excess of the \$3,300,000 proceeds of disposition for the old building over the \$3,500,000 cost of the replacement building).

Using this election will reduce the deemed capital cost for the building as follows:

Actual Cost	\$3,500,000
Capital Gain Reversed By Election	( 200,000)
<u>Deemed Capital Cost Of Replacement Building</u>	<u>\$3,300,000</u>

If the ITA 13(4) election is used in 2016, the amended 2015 recapture would be calculated as follows:

January 1, 2015 UCC Balance		\$1,286,690
Deduction:		
Lesser Of:		
• Proceeds Of Disposition = \$3,300,000		
• Capital Cost = \$3,100,000	(\$3,100,000)	
Reduced By The Lesser Of:		
• Normal Recapture = \$1,813,310		
• Replacement Cost = \$3,500,000	1,813,310	(1,286,690)
<u>Recapture Of 2015 CCA (Amended)</u>		<u>Nil</u>

If both elections are used in 2016, the UCC of the replacement building is calculated as follows:

Deemed Capital Cost	\$3,300,000
Recapture Reversed By Election	( 1,813,310)
<u>UCC - Replacement Building</u>	<u>\$1,486,690</u>

Note that the \$1,486,690 UCC for the new building is equal to the UCC of the old building (\$1,286,690), plus the additional \$200,000 (\$3,500,000 - \$3,300,000) in funds required for its acquisition.

**Equipment** As this is a voluntary disposition, the ITA 13(4) and 44(1) elections can only be used on real property (land and buildings). They cannot be used on the equipment and, as a consequence, the \$237,629 in recapture will not be altered in the amended return. As the elections cannot be used, both the capital cost and the UCC of the new equipment will be \$723,000.

**Part C**

**The Election** The ITA 44(6) election applies when there is a disposition involving a combination of part land and part building. If, for either of the assets, the proceeds of disposition exceed the adjusted cost base, the election allows the transfer of all or part of that excess to the other asset.

As will be demonstrated in this problem, this can provide some relief when ITA 44(1) and ITA 13(4) fail to eliminate all of the capital gains arising on one part of the disposition of the old property. ITA 44(1) fully eliminated the capital gain on the building. However, a \$700,000 capital gain remained on the land. This would suggest that it could be advantageous to transfer some of the proceeds of disposition from the land to the building.

The excess of the proceeds of disposition of the old land over the cost of the replacement land was \$700,000 (\$1,500,000 - \$800,000). This is the amount of transfer that would be required to eliminate the capital gain on the land. However, the excess of the cost of the replacement building over the old building's proceeds of disposition is only \$200,000 (\$3,500,000 - \$3,300,000). If a transfer in excess of this amount is made, any reduction in the capital gain on the land will be matched by an increased capital gain on the building.

Applying ITA 44(6) in an optimal manner will result in the following adjusted proceeds of disposition:

	<b>Land</b>	<b>Building</b>
Actual Proceeds Of Disposition	\$1,500,000	\$3,300,000
Optimal Transfer Land To Building	( 200,000)	200,000
Adjusted Proceeds Of Disposition	\$1,300,000	\$3,500,000

**Application To Land** If both ITA 44(1) and ITA 44(6) are applied, the resulting capital gain on the land will be calculated as the lesser of:

- \$870,000 (\$1,300,000 - \$430,000); and
- \$500,000 (the excess of the \$1,300,000 adjusted proceeds of disposition for the old land over the \$800,000 cost of the replacement land).

This is a reduction of \$200,000 (\$700,000 - \$500,000) from the amount that was calculated when only ITA 44(1) was applied. However, the adjusted cost base of the land would be unchanged by the use of ITA 44(6):

Actual Cost	\$800,000
Capital Gain Reversed By Election (\$1,070,000 - \$800,000)	( 370,000)
Deemed Adjusted Cost Base Of Replacement Land	\$430,000

**Application To Building** With the proceeds of disposition transfer limited to \$200,000, the capital gain on the building is still nil. Specifically, the gain will be the lesser of:

- \$400,000 (\$3,500,000 - \$3,100,000); and
- Nil (reflecting the fact that there was no excess of the \$3,500,000 adjusted proceeds of disposition for the old building over the \$3,500,000 cost of the replacement building).

However, the capital cost and UCC of the building will be reduced by the application of ITA 44(6):

Actual Cost	\$3,500,000
Capital Gain Reversed By The Two Elections	( 400,000)
Deemed Capital Cost	\$3,100,000
Recapture Reversed By Election	( 1,813,310)
UCC - Replacement Building	\$1,286,690

The UCC of the replacement building is now equal to the UCC of the old building.

**Comparison** The table which follows compares the results of using only ITA 44(1) and ITA 13(4) with the results that arise when the ITA 44(6) election is also used.

	No ITA 44(6)	With ITA 44(6)
Capital Gains		
Land	\$700,000	\$500,000
Building	Nil	Nil
Replacement Property		
Adjusted Cost Base Of Land	\$ 430,000	\$ 430,000
Capital Cost Of Building	3,300,000	3,100,000
UCC	1,486,690	1,286,690

As you can see in the table, the use of ITA 44(6) has reduced the capital gain on the land by \$200,000. However, it has done so at the cost of reducing the capital cost and UCC of the replacement building. There is a tax cost associated with this trade off in that only one-half of the capital gain would have been taxed in the current year, whereas the future CCA that has been lost would be fully deductible.

## Solution to Assignment Problem Eight - 14

### Part A

The 2015 tax consequences of the involuntary disposition would include both taxable capital gains and recapture. The amounts would be calculated as follows:

	Land	Building
Proceeds Of Disposition:		
Sale Price Of Land	\$250,000	
Insurance Proceeds For Building		\$1,250,000
Adjusted Cost Base/Capital Cost	( 140,000)	( 750,000)
Capital Gain	\$110,000	\$ 500,000
Inclusion Rate	1/2	1/2
Taxable Capital Gain	\$ 55,000	\$ 250,000
July 1, 2014 UCC Balance		\$ 599,298
Lesser Of:		
• Cost = \$750,000		
• Proceeds Of Disposition = \$1,250,000		( 750,000)
June 30 UCC Balance		(\$ 150,702)
Recapture		150,702
July 1, 2015 UCC		Nil

For the fiscal year ending June 30, 2015, there is no CCA claim. Instead, there is \$150,702 in recaptured CCA that must be taken into income.

As a result of this involuntary disposition, Wilson will have an addition to 2015 Net Income For Tax Purposes of \$455,702 (\$55,000 + \$250,000 + \$150,702).

### Part B

After the land and building are replaced in the fiscal year ending June 30, 2016, an election can be made under ITA 44(1), and an amended return can be filed for 2015. In the amended return, the capital gains will be nil, the lesser of the amounts calculated in Part A and the following:

	Land	Building
Proceeds Of Disposition	\$250,000	\$1,250,000
Less: Cost Of Replacement Property	( 300,000)	( 1,300,000)
Excess, If Any	Nil	Nil

The reversed amounts will have to be removed from the capital costs of the new assets, resulting in the following revised capital cost values:

	New Land	New Building
Cost	\$300,000	\$1,300,000
Capital Gain Reversed By Election	( 110,000)	( 500,000)
Deemed Cost	\$190,000	\$ 800,000

These values can also be calculated by taking the old capital costs of \$140,000 and \$750,000, and adding the additional funds required to replace the old assets (\$50,000 for the land and \$50,000 for the building).

An election can also be made under ITA 13(4) to amend the 2015 recapture to nil. The calculation would be as follows:

July 1, 2014 UCC Balance		\$599,298
Deduction:		
Lesser Of:		
• Proceeds Of Disposition = \$1,250,000		
• Capital Cost = \$750,000	\$750,000	
Reduced By The Lesser Of:		
• Normal Recapture = \$150,702		
• Replacement Cost = \$1,300,000	( 150,702)	( 599,298)
Recapture Of 2015 CCA (Amended)		Nil

The UCC of the new building will be adjusted for this change as follows:

Deemed Capital Cost Of Building		
(See Preceding Calculation)	\$ 800,000	
Recapture Reversed - ITA 13(4) Election	( 150,702)	
UCC	\$ 649,298	

This \$649,298 can also be calculated as the old UCC of \$599,298, plus the \$50,000 (\$1,300,000 - \$1,250,000) in funds invested by Wilson in excess of the insurance proceeds.

**Part C**

The CCA claim for the fiscal year ending June 30, 2016 would be calculated as follows:

Opening UCC Balance	Nil
Addition of New Building UCC	\$649,298
One-Half Net Additions	( 324,649)
CCA Base	\$324,649
Enhanced Rate For New Class 1 Non-Residential Buildings	6%
CCA For 2016	\$ 19,479

## Solution to Assignment Problem Eight - 15

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### Part A

#### Property Income

Owen's property income can be calculated as follows:

Eligible Dividends	\$32,400
Gross Up On Eligible Dividends [(38%)(\$32,400)]	12,312
Non-Eligible Dividends	22,000
Gross Up On Non-Eligible Dividends [(18%)(\$22,000)]	3,960
Net Rental Income (Note 1)	700
Re-Can Distribution [(1,000)(\$2.00 - \$0.75)]	1,250
<b>Total Property Income</b>	<b>\$72,622</b>

**Note 1** Net rental income can be calculated as follows:

Gross Rents [(10)(\$3,000)]	\$30,000
Expenses Other Than CCA	( 22,000)
<b>Income Before CCA</b>	<b>\$ 8,000</b>
<b>CCA</b>	
Building (See Following Calculation) (\$3,100)	( 3,100)
Furnishings [(20%)(1/2)(\$42,000)] ( 4,200)	( 7,300)
<b>Net Rental Income</b>	<b>\$ 700</b>
Original Cost Of Building (\$215,000 - \$65,000)	\$150,000
Fair Market Value At Change In Use (\$235,000 - \$75,000)	\$160,000
Original Cost	( 150,000)
<b>Excess</b>	<b>\$ 10,000</b>
Bump Up For CCA Purposes	1/2 5,000
<b>Base Before First Year Rule</b>	<b>\$155,000</b>
One-Half Net Additions [(1/2)(\$155,000)]	( 77,500)
<b>CCA Base</b>	<b>\$ 77,500</b>
Rate	4%
<b>CCA - Class 1</b>	<b>\$ 3,100</b>

#### Capital Gains

Owen's taxable capital gains (allowable capital losses) can be calculated as follows:

Eligible Small Business Corporation Shares (Note 2)	\$ 13,333
House (Note 3)	16,364
ReCan Units (Note 4)	( 393)
Land (Note 5)	2,500
Debit Agricole Shares (Note 6)	( 4,305)
Power Boat (Note 7)	15,000
Net Gain On Stamp Collection And Oil Painting (Note 8)	1,000
<b>Net Capital Gains</b>	<b>\$43,499</b>
Inclusion Rate	1/2
<b>Net Taxable Capital Gains</b>	<b>\$21,750</b>

**Note 2** The capital gain to be recognized on the sale of eligible small business shares can be calculated as follows:

Proceeds Of Disposition	\$600,000
Adjusted Cost Base	( 520,000)
Capital Gain	\$ 80,000
Deferral (See Following Calculation)	( 66,667)
Capital Gain To Be Recognized	\$ 13,333

If Owen had invested all of the proceeds in a different eligible small business corporation, the entire \$80,000 gain could be deferred. However, since he only used \$500,000 of the proceeds for re-investment, the deferral is limited to \$66,667 [(\$80,000)(500,000 ÷ \$600,000)]. Note that the adjusted cost base of the new eligible small business corporation shares is reduced by the deferred gain to \$433,333 (\$500,000 - \$66,667).

**Note 3** While there is a gain on both the sale of the house and the deemed disposition of the cottage, the principal residence exemption can be applied against either or both of these properties. The relevant calculations are as follows:

	House	Cottage
Proceeds Of Disposition (Deemed)	\$375,000	\$235,000
Adjusted Cost Base	( 320,000)	( 215,000)
Selling Costs	( 20,000)	N/A
Capital Gain	\$ 35,000	\$ 20,000

As the house was owned for 16 years, the annual gain on this property is \$2,187.50 (\$35,000 ÷ 16). The annual gain on the cottage, owned for 11 years, is \$1,818.18 (\$20,000 ÷ 11).

As the annual gain on the house is larger, the maximum number of required years should be applied to that property. This would be the 15 years 2000 through 2014, leaving the year 2015 for the cottage. The results are as follows:

	House	Cottage
Pre-Exemption Gain	\$35,000	\$20,000
Exemption:		
House [(35,000)(15 + 1) ÷ 16]	( 35,000)	
Cottage [(\$20,000)(1 + 1) ÷ 11]		( 3,636)
Capital Gain After Exemption	Nil	\$16,364

**Note 4** The total distribution by this trust was \$2,000 [(1,000)(2)]. At a price of \$42 per unit, this would result in Owen acquiring an additional 47.62 (2,000 ÷ \$42) units, giving him a total holding of 1,047.62 (1,000 + 47.62) units. Based on this, the capital loss on the sale of the trust units would be calculated as follows:

Proceeds Of Disposition [(1,047.62)(39.00)]		\$40,857
Adjusted Cost Base		
Original Cost [(1,000)(40)]	\$40,000	
Additional Investment	2,000	
Return Of Capital [(1,000)(0.75)]	( 750)	( 41,250)
Capital Loss		(\$ 393)

**Note 5** Since the land had not been used to earn income, the undeducted property taxes could not be added to the adjusted cost base of the land. The capital gain on the 2014 sale of the land would be calculated as follows:

Proceeds Of Disposition	\$125,000
Adjusted Cost Base	( 100,000)
<u>Capital Gain Before Reserve</u>	<u>\$ 25,000</u>

At the end of 2014, the uncollected proceeds are \$87,500 (\$125,000 - \$37,500). Given this, 2014 capital gain reserve was \$17,500, the lesser of:

- $[(\$25,000)(\$87,500 \div \$125,000)] = \$17,500$
- $[(\$25,000)(20\%)(4 - 0)] = \$20,000$

At the end of 2015, the uncollected proceeds are unchanged at \$37,500. Based on this, the capital gain to be recognized for 2015 would be as follows:

2014 Reserve Added To Income	\$17,500
2015 Reserve - Lesser Of:	
$[(\$25,000)(\$87,500 \div \$125,000)] = \$17,500$	
$[(\$25,000)(20\%)(4 - 1)] = \$15,000$	( 15,000)
<u>2015 Capital Gain</u>	<u>\$ 2,500</u>

**Note 6** The cost of Owen's purchases of the Debit Agricole shares, converted to Canadian dollars, is as follows:

Purchase Date		Cost In Canadian Dollars
October 1, 2012	$[(1,000)(\text{€}14.00)(\$1.42)]$	\$19,880
November 4, 2013	$[(300)(\text{€}14.50)(\$1.40)]$	6,090
June 24, 2015	$[(600)(\text{€}15.50)(\$1.36)]$	12,648

After the 400 shares are sold in 2014, the adjusted cost base of the 900 (1,000 + 300 - 400) remaining shares is \$17,982  $\{[900][(\$19,880 + \$6,090) \div 1,300]\}$ .

For the shares sold on December 2, 2015, the capital loss would be calculated as follows:

Proceeds Of Disposition $[(900 + 600)(\text{€}13.00)(\$1.35)]$	\$26,325
Adjusted Cost Base (\$17,982 + \$12,648)	( 30,630)
<u>Capital Loss</u>	<u>(\$ 4,305)</u>

Since Owen immediately converts the Euros to dollars, there is no gain or loss on the foreign currency conversion.

**Note 7** The power boat would be designated as personal use property. While losses on such property are not deductible, gains are taxable. The capital gain would be calculated as follows:

Proceeds Of Disposition	\$50,000
Original Cost	(\$10,000)
Restoration Costs	( 25,000)
<u>Capital Gain</u>	<u>\$15,000</u>

**Note 8** The net capital gain on listed personal property would be calculated as follows:

	<b>Stamp Collection</b>	<b>Oil Painting</b>
Proceeds Of Disposition (\$1,000 Floor)	\$12,000	\$1,000
Adjusted Cost Base	( 8,000)	( 4,000)
Capital Gain (Loss)	\$ 4,000	(\$3,000)

As losses on listed personal property can be deducted against gains on listed personal property, the net inclusion is \$1,000 (\$4,000 - \$3,000).

Owen's Net Income For Tax Purposes and Taxable Income can be calculated as follows:

Property Income	\$72,622
Net Taxable Capital Gains	21,750
Net Income For Tax Purposes	\$94,372
Deductions	Nil
Taxable Income	\$94,372

**Arlene** Arlene's Net Income For Tax Purposes and Taxable Income would simply be the \$7,650 that was given in the problem.

### **Base Tax Payable**

**Owen** Based on the Taxable Income of \$94,372 that has been calculated for Owen, his Base Tax Payable would be calculated as follows:

Tax On First \$89,401	\$16,539
Tax On Next \$4,971 (\$94,372 - \$89,401) At 26 Percent	1,292
Tax Payable Before Credits	\$17,831
Non-Refundable Personal Credits Other Than Donations:	
Basic Personal Amount	(\$11,327)
Spousal (\$11,327 - \$7,650)	( 3,677)
Caregiver - Philip [\$4,608 - (\$17,300 - \$15,735)]	( 3,043)
Transit Passes [(12)(\$225) + (8)(\$175)]	( 4,100)
Children's Arts - Lesser Of • \$825; and • \$500	( 500)
Volunteer Search And Rescue	( 3,000)
Transfer Of Marlene's Education Related Credits (Note 9)	( 5,000)
Medical Expenses (Note 10)	( 1,467)
Credit Base	(\$32,114)
Rate	15%
	(\$ 4,817)
Charitable Donations [(15%)(\$200) + (29%)(\$5,000 - \$200)]	( 1,422)
Dividend Tax Credits:	
Eligible Dividends [(38%)(6/11)(\$32,400)]	( 6,716)
Non-Eligible Dividends [(18%)(13/18)(\$22,000)]	( 2,860)
Owen's Base Tax Payable	\$ 2,016

**Note 9** Marlene's total education related credits are calculated as follows:

Tuition	\$11,400
Education [(9)(\$400)]	3,600
Textbook [(9)(\$65)]	585
<hr/>	<hr/>
Total	\$15,585
<hr/>	<hr/>

The transfer would be the lesser of \$5,000 and this total. This would leave Marlene with a carry forward of education related amounts of \$10,585 (\$15,585 - \$5,000).

**Note 10** All of the \$5,475 of services paid for by Owen would be eligible medical expenses, with the exception of his tummy tuck surgery which would appear to be cosmetic. Given this, the available credit would be calculated as follows:

Eligible Expenses (\$5,475 - \$1,800)	\$3,675
Reduced By The Lesser Of:	
• [(3%)(\$94,372)] = \$2,831	
• 2015 Threshold Amount = \$2,208	( 2,208)
<hr/>	<hr/>
Allowable Medical Costs	\$1,467
<hr/>	<hr/>

***Arlene's Base Tax Payable***

Arlene's Base Tax Payable would be calculated as follows:

Tax Before Credits [(15%)(\$7,650)]	\$1,148
Basic Personal Credit [(15%)(\$11,327)]	( 1,699)
<hr/>	<hr/>
Arlene's Base Tax Payable	Nil
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***Combined Base Tax Payable***

The combined Base Tax Payable for Owen and Arlene would be \$2,016 (\$2,016 + Nil).

**Part B**

***The Required Transfer***

In calculating the combined Adjusted Base Tax Payable, the required transfer would be the lesser of \$50,000 and \$43,361 [(\$94,372 - \$7,650) ÷ 2]. Transferring the lesser amount of \$43,361 will leave Owen with Adjusted Taxable Income of \$51,011 (\$94,372 - \$43,361) and Arlene with Adjusted Taxable Income that also totals \$51,011 (\$7,650 + \$43,361).

***Adjusted Base Tax Payable***

**Arlene** Arlene's Adjusted Base Tax Payable would be calculated as follows:

Tax On First \$44,701	\$6,705
Tax On Next \$6,310 (\$51,011 - \$44,701) At 22 Percent	1,388
<hr/>	<hr/>
Tax Payable Before Credit	\$8,093
Basic Personal Credit [(15%)(\$11,327)]	( 1,699)
<hr/>	<hr/>
Arlene's Adjusted Base Tax Payable	\$6,394
<hr/>	<hr/>

**Owen** Owen's Adjusted Base Tax Payable would be calculated as follows:

Tax On First \$44,701		\$6,705
Tax On Next \$6,310 (\$51,011 - \$44,701) At 22 Percent		1,388
<hr/>		
Tax Payable Before Credits		\$8,093
Non-Refundable Personal Credits Other Than Donations:		
Basic Personal Amount	(\$11,327)	
Spousal (\$11,327 - \$7,650)	( 3,677)	
Caregiver - Philip		
[\$4,608 - (\$17,300 - \$15,735)]	( 3,043)	
Transit Passes [(12)(\$225) + (8)(\$175)]	( 4,100)	
Children's Arts - Lesser Of		
• \$825; and		
• \$500	( 500)	
Volunteer Search And Rescue	( 3,000)	
Transfer Of Marlene's Education		
Related Credits (Note 9)	( 5,000)	
Medical Expenses (Note 10)	( 1,467)	
<hr/>		
Credit Base	(\$32,114)	
Spousal Adjustment (\$11,327 - \$7,650)	3,677	
<hr/>		
Credit Base	(\$28,437)	
Rate	15%	( 4,266)
Charitable Donations		
[(15%)(\$200) + (29%)(\$5,000 - \$200)]		( 1,422)
Dividend Tax Credits:		
Eligible Dividends [(38%)(6/11)(\$32,400)]		( 6,716)
Non-Eligible Dividends [(18%)(13/18)(\$22,000)]		( 2,860)
<hr/>		
Owen's Adjusted Base Tax Payable		Nil
<hr/>		

Note that the non-refundable credits claimed here are the same as those used in the determination of Owen's Base Tax Payable (we have not duplicated the calculations here, but simply referred to the notes that were provided with the Base Tax Payable calculation). The only difference is the spousal adjustment which removes the spousal credit amount.

### **Combined Adjusted Base Tax Payable**

The combined Adjusted Base Tax Payable would total \$6,394 (\$6,394 + Nil).

### **Part C**

The result here of applying the Family Tax Cut procedures is an increase in combined Tax Payable of \$4,378 (\$6,394 - \$2,016). The reason for this is fairly obvious. With the transfer of income from Owen to Arlene, Owen did not have enough remaining income to use all of his available tax credits. He is left with \$7,171 in unused, non-refundable tax credits.

### **Part D**

Since the Family Tax Cut is nil, the combined Tax Payable for Owen and Arlene would be calculated as follows:

Owen's Tax Payable Before The Family Tax Cut		
(Same As Base Tax Payable)		\$2,016
Arlene's Tax Payable (Same As Base Tax Payable)		Nil
Family Tax Cut		Nil
<hr/>		
Combined Tax Payable After The Family Tax Cut		\$2,016
<hr/>		

## Solution to Assignment Problem Eight - 16

### Employment Income

Anita's commission income of \$36,000 is large enough not to limit the deduction of her employment related expenses. The required calculations here would be as follows:

Salary	\$142,000
Additions	
Bonus (Note 1)	Nil
Commissions	36,000
Taxable Benefit - Employer Paid Life Insurance Premium	1,100
Expense Allowance [(12)(\$2,500)]	30,000
Stock Option Benefit [(1,500)(\$41 - \$32)]	13,500
Disability Insurance Benefits (Note 2)	5,500
Deductions:	
RPP Contributions	( 5,900)
Professional Association Dues	( 1,500)
Home Office Expenses (Note 3)	( 2,040)
Automobile Costs	
CCA (Note 4)	( 5,814)
Operating Costs [(80%)(\$5,400)]	( 4,320)
Hotel Costs	( 6,300)
Airline And Other Transportation	( 12,300)
Client Meals And Entertainment [(1/2)(\$8,400)]	( 4,200)
<u>Net Employment Income</u>	<u>\$185,726</u>

**Note 1** As the bonus is paid more than 180 days after the employer's year end, the employer will not be able to deduct the accrual in 2015. This, however, does not change Anita's tax position. She will not have to include the bonus in income until 2016.

**Note 2** While Anita must include the \$6,000 [(3)(\$2,000)] in benefits received, she can deduct the \$500 (\$240 + \$260) in premiums that she has paid for the plan.

**Note 3** As Anita has commission income, she can deduct 20 percent of all of the costs except the mortgage interest. This will provide a deduction of \$2,040 [(20%)(\$1,800 + \$7,200 + \$1,200)].

**Note 4** The 2015 CCA would be based on a UCC calculated as though 100 percent of the available CCA had been taken in 2014. The 100 percent CCA for 2014 would be \$4,275 [(1/2)(30%)(\$28,500)]. Using this figure, the deductible 2015 CCA would be \$5,814 [(80%)(30%)(\$28,500 - \$4,275)].

### Property Income

The required calculations here would be as follows:

Eligible Dividends	\$ 2,200
Gross Up On Eligible Dividends [(38%)(\$2,200)]	836
Income Trust Distribution [(1,500)(\$2)]	3,000
Net Rental Income (Note 5)	22,875
<u>Net Property Income</u>	<u>\$28,911</u>

**Note 5** As the change in use is from personal to business, the base for calculating CCA would be as follows:

Cost Of Sailboat		\$123,000
Fair Market Value At Change In Use	\$147,000	
Cost	( 123,000)	
Increase In Value (Bump Up)	\$ 24,000	
Inclusion Factor	1/2	12,000
Cost For UCC And CCA Purposes		\$135,000
One-Half Net Additions		( 67,500)
CCA Base		\$ 67,500
Rate For Class 7		15%
CCA (No Part Year Proration)		\$ 10,125

Using this CCA figure, net rental income would be \$22,875 (\$46,000 - \$13,000 - \$10,125). Note that if Anita were to offer substantial services besides the boat rental, such as providing meals and a crew for the sailboat, this would be considered business, not property income. In that case, the CCA would be prorated for the short fiscal year.

**Net Taxable Capital Gains**

The required calculations here would be as follows:

Land Sale (\$220,000 - \$85,000)	\$135,000	
Reserve For Land Sale (Note 6)	( 104,318)	\$30,682
Sailboat Change In Use (\$147,000 - \$123,000)		24,000
Capital Income Trust (Note 7)		6,240
Antique Clock (\$5,000 - \$1,000 Floor) (Note 8)		4,000
Total Capital Gains		\$64,922
Capital Loss On Stock Option Shares [(1,500)(\$41 - \$31)]	( 15,000)	
Net Taxable Capital Gains		\$49,922
Inclusion Rate		1/2
Net Taxable Capital Gains		\$24,961

**Note 6** The total proceeds of disposition for the land would be \$220,000 [\$50,000 + (10)(\$17,000)]. Given this, the gain on the land would be \$135,000 (\$220,000 - \$85,000). The maximum reserve would be \$104,318, the lesser of:

- \$104,318 [(\$135,000)(\$170,000 ÷ \$220,000)]
- \$108,000 [(\$135,000)(20%)(4 - 0)]

**Note 7** The \$3,000 income trust distribution was used to acquire 120 additional units (\$3,000 ÷ \$25). Using this figure, the capital gain calculation would be as follows:

Proceeds Of Disposition [(1,500 + 120)(\$27)]	\$43,740
Adjusted Cost Base [(1,500)(\$23) + \$3,000]	( 37,500)
Capital Gain	\$ 6,240

**Note 8** Since the clock had an adjusted cost base of \$300, its deemed adjusted cost base is \$1,000.

**Net And Taxable Income**

The required calculations here would be as follows:

Net Employment Income	\$185,726
Net Property Income	28,911
Net Taxable Capital Gains	24,961
<hr/>	
Net Income For Tax Purposes	\$239,598
Stock Option Deduction (Note 9)	Nil
<hr/>	
Taxable Income	\$239,598
<hr/>	

**Note 9** As the option price was less than fair market value when the options were granted, no ITA 110(1)(d) deduction is available.

**Federal Tax Payable**

The required calculations here would be as follows:

Tax On First \$138,586		\$29,327
Tax On Next \$101,012 (\$239,598 - \$138,586) At 29 Percent		29,293
<hr/>		
Tax Before Credits		\$58,620
Tax Credits:		
Basic Personal Amount	(\$11,327)	
Common-Law Partner (Note 10)	( 3,887)	
Lex - Family Caregiver	( 2,093)	
Transfer Of Lex's Disability	( 7,899)	
Disability Supplement	( 4,607)	
Transfer Of Education Credits (Note 11)	( 5,000)	
Medical Expenses (Note 12)	( 17,392)	
EI	( 931)	
CPP	( 2,480)	
Canada Employment Credit	( 1,146)	
<hr/>		
Total Credit Base	(\$56,762)	
Rate	15%	( 8,514)
<hr/>		
Subtotal		\$50,106
Charitable Donations Credit		
[(15%)(\$200) + (29%)(\$3,600 - \$200)]		( 1,016)
Dividend Tax Credit [(6/11)(\$836)]		( 456)
<hr/>		
Federal Tax Payable		\$48,634
<hr/>		

**Note 10** Only the taxable spousal support payments of \$6,000 [(12)(\$500)] are included in Peaches' income. In addition, she has the Universal Child Care Benefits of \$1,440. This gives a credit base of \$3,887 (\$11,327 - \$6,000 - \$1,440).

**Note 11** The transfer of Peaches' tuition, education and textbook credits would be \$5,000, the lesser of:

- \$5,000
- $[\$9,400 + (7)(\$400) + (7)(\$65)] = \$12,655$

**Note 12** The base for the medical expense tax credit would be calculated as follows:

Total Medical Expenses	\$19,600
Lesser Of:	
• [(3%)(\$239,598)] = \$7,188	
• 2015 Threshold Amount = \$2,208	( 2,208)
<hr/>	
Medical Expense Tax Credit Base	\$17,392
<hr/>	

## CHAPTER NINE SOLUTIONS

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### Solution to Assignment Problem Nine - 1

ITA 56(1)(a)(iii) requires the inclusion of death benefits in income in the year in which they are received. However, ITA 248 defines these benefits in a manner that allows the exclusion of the first \$10,000 of a death benefit paid to a surviving spouse.

As a consequence, none of the \$6,000 payment that was received during 2015 will be included in Mr. Long's 2015 Net Income For Tax Purposes, and only \$2,000 ( $\$6,000 + \$6,000 - \$10,000$ ) will be taxable in 2016.

After the first \$10,000 in death benefits is received tax free, any subsequent death benefits received will be fully taxable to Mr. Long.

## Solution to Assignment Problem Nine - 2

### **Income At New Location**

As both the general moving allowance and the compensation for the housing loss were paid for by the Calgary office, these would likely be considered income at the new location. Given this view, Yolanda's employment income at the new location can be calculated as follows:

General Moving Allowance	\$12,000
Compensation For Loss On Regina Residence (Note 1)	2,500
Salary At New Location (1 Month)	7,500
<u>Total Employment Income At New Location</u>	<u>\$22,000</u>

**Note 1** Under ITA 6(20), one-half of any housing loss reimbursement in excess of \$15,000 must be included in income. As the total reimbursement was \$20,000, the inclusion would be \$2,500  $[(1/2)(\$20,000 - \$15,000)]$ .

### **Deductible Expenses**

Deductible moving expenses can be calculated as follows:

Real Estate Commission - Regina Home	\$16,350
Legal Fees - Regina Home	425
Other Regina Home Costs (Not Deductible)	Nil
Moving Company Costs (\$2,800 + \$900)	3,700
Costs Of Travel To Calgary (\$120 + \$380)	500
Costs Of Food And Lodging (Note 2):	
Calgary House Hunting Trip	675
Waiting For Calgary Furniture	2,580
<u>Moving Expense Deductions Available</u>	<u>\$24,230</u>

**Note 2** Costs for food and lodging at or near an old or new residence are limited to a maximum period of 15 days. As soon as the lease is signed (assuming that the person doesn't back out before the lease actually begins) the premises is a new residence. Yolanda has a total of 24 days; 3 days after she signs the lease in Calgary at \$225 per day, 7 days in Regina at \$210 per day, and 14 days in Calgary at \$215 per day.

As they are the most expensive days, she will deduct the first 3 days in Calgary at \$225 per day for a total of \$675  $[(3)(\$225)]$ , followed by the remaining 12 days in Calgary at \$215 per day. The total here is \$2,580  $[(12)(\$215)]$ .

### **Actual Deduction**

The actual 2015 deduction will be limited to \$22,000, the amount of income earned at the new location. This will leave a carry forward to 2016 of \$2,230  $(\$24,230 - \$22,000)$ .

## Solution to Assignment Problem Nine - 3

### Andrea Brock

Generally, the spouse with the lower income must claim the deduction for child care expenses. However, under certain circumstances, for example if this spouse is a full time student, the spouse with the higher income can claim the deduction for the period the spouse is a student. Under this provision, Andrea can claim the least of the following:

	Case A	Case B
Actual Payments [(\$350)(50)]	\$17,500	\$17,500
2/3 Of Earned Income [(2/3)(\$109,100)]*	\$72,733	\$72,733
Annual Expense Limit:		
Case A (\$5,000 + \$8,000)	\$13,000	
Case B (\$5,000 + \$8,000 + \$11,000)		\$24,000
Periodic Expense Limit:		
Case A [(\$125 + \$200)(7)]	\$ 2,275	
Case B [(\$125 + \$200 + \$275)(7)]		\$ 4,200

\*Andrea's Earned Income would be calculated as follows:

Gross Salary (No RPP Deduction)	\$ 92,300
Tax Preparation Fees	12,700
Stock Option Benefit	4,100
<u>Earned Income</u>	<u>\$109,100</u>

In Case A, the least of these figures is \$2,275, the Periodic Expense Limit.

In Case B, the least of the figures is \$4,200, also the Periodic Expense Limit.

### Andrew Brock

The calculations for Andrew are as follows:

	Case A	Case B
Actual Payments [(\$350)(50)]	\$17,500	\$17,500
2/3 Of Earned Income [(2/3)(\$24,000)]*	\$16,000	\$16,000
Annual Expense Limit:		
Case A (\$5,000 + \$8,000)	\$13,000	
Case B (\$5,000 + \$8,000 + \$11,000)		\$24,000

\* The net business income, not gross revenues is used to calculate earned income. The universal child care benefit payments are not included in Andrew's earned income.

The least of the figures in Case A is \$13,000, the annual expense limit. Deducting from this the amount claimed by Andrea leaves a deduction for Andrew of \$10,725 (\$13,000 - \$2,275).

In Case B, the least of the figures is \$16,000. Deducting from this the amount claimed by Andrea leaves a deduction for Andrew of \$11,800 (\$16,000 - \$4,200).

As Andrea is the higher income spouse, the number of weeks she is unable to care for the children has no effect on the child care expense calculations.

### No Carry Forward

In both Cases, the total deductible child care costs is less than the actual amount paid. Any amounts paid in the year that are not deductible are lost and cannot be carried forward.

## Solution to Assignment Problem Nine - 4

### Tax Payable - No Pension Income Splitting

**Laura** Laura's federal Tax Payable would be calculated as follows:

Tax Before Credits [(15%)( $\$10,300$ )]	\$1,545
Basic Personal Credit [(15%)( $\$11,327$ )]	( 1,699)
Age - Can Transfer As Not Needed	( 7,033)
Pension - No Qualifying Income	Nil
Federal Tax Payable - Laura	Nil

**Alex** Alex's federal Tax Payable would be calculated as follows:

Tax On First $\$44,701$	\$ 6,705
Tax On Next $\$27,099$ ( $\$71,800 - \$44,701$ ) At 22%	5,962
Total Before Credits	\$12,667
Credits:	
Basic Personal	( $\$11,327$ )
Spousal ( $\$11,327 - \$10,300$ )	( 1,027)
Age [ $\$7,033 - (15\%)(\$71,800 - \$35,466)$ ]	( 1,583)
Transfer Of Age From Laura	( 7,033)
Pension	( 2,000)
Total	( $\$22,970$ )
Rate	15%
	( 3,446)
Federal Tax Payable	\$ 9,221
OAS Clawback	N/A
Federal Tax Payable - Alex	\$ 9,221

As Alex's Net Income For Tax Purposes is less than the OAS clawback threshold of  $\$72,809$ , no clawback is required

### Tax Payable - With Pension Income Splitting

**Revised Taxable Incomes** Neither OAS payments nor CPP receipts are eligible for reallocation under the pension income splitting provisions. Given this, only Alex's  $\$52,000$  in RPP receipts can be split between the spouses.

With this  $\$26,000$  [(1/2)( $\$52,000$ )] reallocation, Alex's Net Income For Tax Purposes and Taxable Income will be  $\$45,800$  ( $\$71,800 - \$26,000$ ).

The corresponding figure for Laura will be  $\$36,300$  ( $\$10,300 + \$26,000$ ).

**Laura** With pension income splitting, Laura's federal Tax Payable would be calculated as follows:

Tax Before Credits [(15%)(\\$36,300)]		\$5,445
Credits:		
Basic Personal	(\$11,327)	
Age [\$7,033 - (15%)(\\$36,300- \$35,466)]	( 6,908)	
Pension	( 2,000)	
Total	(\$20,235)	
Rate	15%	( 3,035)
Federal Tax Payable		\$2,410
OAS Clawback		N/A
Federal Tax Payable - Laura		\$2,410

**Alex** With pension income splitting, Alex's federal Tax Payable would be calculated as follows:

Tax On First \$44,701		\$6,705
Tax On Next \$1,099 (\$45,800 - \$44,701) At 22%		242
Total Before Credits		\$6,947
Credits:		
Basic Personal	(\$11,327)	
Spousal (\$11,327 - \$36,300)	Nil	
Age [\$7,033 - (15%)(\\$45,800- \$35,466)]	( 5,483)	
Pension	( 2,000)	
Total	(\$18,810)	
Rate	15%	( 2,822)
Federal Tax Payable		\$4,125
OAS Clawback		N/A
Federal Tax Payable - Alex		\$4,125

### **Comparison**

The results, with and without pension income splitting can be compared as follows:

Federal Tax Payable - No Pension Income Splitting	\$9,221
Federal Tax Payable - With Pension Income Splitting	( 6,535)
(\$4,125 + \$2,410)	
Savings Resulting From Pension Income Splitting	\$2,686

### **Factors Creating The Tax Payable Difference**

- Tax savings as the amount of Alex's income that is taxed at 22 percent, rather than 15 percent is greatly decreased.
- Tax savings from an increase in the value of Alex's age credit that is considerably larger than the decrease in Laura's age credit.
- Tax savings since Laura can now deduct a pension income credit.
- Increased combined Tax Payable to a modest degree from the elimination of the small spousal credit.

Note that it might be possible to request that Alex's CPP benefits be split, especially as they have been married many years. The portion paid separately to Laura would be taxed in her hands. This would be unlike pension income splitting which is implemented entirely in the tax returns and does not involve any actual payments being split.

Since a small portion of Alex's income is being taxed at 22 percent, splitting his CPP benefit could result in no income being taxed at 22 percent if maximum pension income splitting is used.

## Solution to Assignment Problem Nine - 5

### Part A - Net Income For Tax Purposes

The minimum Net Income For Tax Purposes that can be reported by Ms. Watts is calculated as follows:

Universal Child Care Benefits		\$ 1,440
Wages From Cold Lake Employment	\$9,600	
Moving Costs To Cold Lake (Note 1)	( 685)	8,915
Scholarship Received	\$4,000	
Exempt Portion Of Scholarship (100%)	( 4,000)	Nil
Child Care Costs (Note 2)		( 1,500)
Employment Income In Calgary	\$600	
Moving Costs To Calgary (Note 1)	( 600)	Nil
Eligible Dividends Received		3,500
Gross Up Of Dividends [(38%)(3,500)]		1,330
Child Support Received (Note 3)		Nil
Inheritance (Not Taxable)		Nil
TFSA Contributions (Note 4)		Nil
TFSA Withdrawal (Note 4)		Nil
RESP Contributions (Note 5)		Nil
Net Income For Tax Purposes		\$13,685

**Note 1** The cost of the move to Cold Lake is deductible against the income that was earned there as it is more than 40 km from Calgary. The moving costs related to the move back to Calgary can be deducted to the extent of her employment income at that location. The remaining \$226 (\$826 - \$600) can be carried forward to apply against any eligible income that is earned in Calgary during 2016.

**Note 2** As she is the lower income spouse, Ms. Watts will deduct the child care payments. The deduction is the least of the following amounts:

- The amount paid = \$1,500 [(12)(\$125)].
- The annual child care expense amount = \$10,000 [(2)(\$5,000)].
- Two-thirds of Earned Income = \$6,800 [(2/3)(\$9,600 + \$600)].

Note that the Universal Child Care Benefits are not included in earned income.

**Note 3** Child support payments are not deductible to the payor and are not taxed in the hands of the recipient.

**Note 4** TFSA contributions and withdrawals have no tax consequences. There is also no income attribution as a result of the TFSA contribution by Ms. Watts' husband.

**Note 5** Contributions to RESPs are not deductible.

**Part B - Registered Education Savings Plan**

While contributions to RESPs are not deductible, earnings within the plan accumulate on a tax free basis. Further, when the earnings are withdrawn, they are likely to be taxed in the hands of the plan beneficiaries. As they will be full or part time students at this time, they will either be in a low tax bracket or, in many cases, have income that is below the basic personal tax credit. This arrangement can involve a considerable savings in taxes.

In addition, for contributions of up to \$2,500 per year, the federal government will make additional contributions under the Canada Education Savings Grants (CESG) program. These contributions will add a minimum of \$500 to the first \$2,500 of annual contributions. Note, however, that given her husband's level of income, the family will not be eligible for the Canada Learning Bonds program.

Given the potential tax savings, as well as the federal government contributions under the CESG program, Ms. Watts and her husband should consider contributing at least \$2,500 per year to each of the children's RESPs.

Since her children have not had RESPs before, they have CESG contribution room carried forward. Ms. Watts should determine the contribution schedule required to maximize the CESGs for both children so that she can plan to take advantage of the CESG contribution room if there are sufficient funds available.

## Solution to Assignment Problem Nine - 6

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### **Part A - Case 1 - Sale To Arm's Length Party**

The result for Martin would be as follows:

Proceeds Of Disposition	\$500,000
Adjusted Cost Base	( 360,000)
Capital Gain	\$140,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 70,000

With respect to the subsequent sale by the arm's length purchaser, the results for that individual would be as follows:

Proceeds Of Disposition	\$500,000
Adjusted Cost Base	( 500,000)
Capital Gain	Nil

### **Part A - Case 2 - Sale To Sister**

The result for Martin would be as follows:

Deemed Proceeds Of Disposition - ITA 69(1)(b)	\$500,000
Adjusted Cost Base	( 360,000)
Capital Gain	\$140,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 70,000

With respect to the subsequent sale by Martin's sister, the results for her would be as follows:

Proceeds Of Disposition (Actual)	\$500,000
Adjusted Cost Base	( 360,000)
Capital Gain	\$140,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 70,000

Note that in this case the \$140,000 capital gain is subject to double taxation.

### **Part A - Case 3 - Gift To Son**

The result for Martin would be as follows:

Deemed Proceeds Of Disposition - ITA 69(1)(b)	\$500,000
Adjusted Cost Base	( 360,000)
Capital Gain	\$140,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 70,000

With respect to the subsequent sale by Martin's son, the results for him would be as follows:

Proceeds Of Disposition	\$500,000
Adjusted Cost Base (Actual)	( 500,000)
Capital Gain	Nil

The fact that his son is younger than 18 years of age does not affect the results.

**Part A - Case 4 - Sale To Mother**

The result for Martin would be as follows:

Proceeds Of Disposition (Actual)	\$600,000
Adjusted Cost Base	( 360,000)
Capital Gain	\$240,000
Inclusion Rate	1/2
Taxable Capital Gain	\$120,000

With respect to the subsequent sale by Martin's mother, the results for her would be as follows:

Proceeds Of Disposition (Actual)	\$500,000
Adjusted Cost Base - ITA 69(1)(a)	( 500,000)
Capital Gain	Nil

Despite the fact that Martin had to record the actual proceeds of \$600,000, his mother's adjusted cost base will be the fair market value of \$500,000. This means that she did not have a \$100,000 capital loss to economically offset (for the family unit) the effect of his capital gain.

**Part B**

In Case 2, the sale was for \$360,000, less than the \$500,000 fair market value of the asset. Martin might agree to do this in an attempt to transfer the \$140,000 gain to his sister. This could be motivated by the fact that she is in a lower tax bracket. It could also reflect the fact that she has unused capital losses that she would like to be able to use.

In Case 4, the sale was for \$600,000, more than the \$500,000 fair market value of the asset. The motivation here could be that his mother has capital gains that she would like to offset with a capital loss resulting from her re-selling the asset for \$500,000 and/or Martin has unused capital losses greater than \$140,000 that he would like to be able to use.

## Solution to Assignment Problem Nine - 7

### Case One - FMV > Transferor's Capital Cost

The results of the disposition for John can be calculated as follows:

UCC Balance	\$69,000
Lesser Of:	
Proceeds Of Disposition = \$165,000	
Capital Cost = \$97,000	( 97,000)
<u>Negative Ending UCC Balance = Recapture Of CCA</u>	<u>(\$28,000)</u>
Proceeds Of Disposition	\$165,000
Capital Cost	( 97,000)
<u>Capital Gain</u>	<u>\$ 68,000</u>
Inclusion Rate	1/2
<u>Taxable Capital Gain</u>	<u>\$ 34,000</u>

John's Net Income For Tax Purposes will increase by \$62,000 (\$28,000 + \$34,000).

For his son, his capital cost for capital gains purposes will be the transfer price of \$165,000. However, because the fair market value of the asset exceeded its original capital cost, ITA 13(7)(e) will limit the value used for CCA and recapture calculations to the following amount:

$$[\$97,000 + (1/2)(\$165,000 - \$97,000)] = \$131,000$$

### Case Two - FMV < Transferor's Capital Cost

The results of this disposition for John can be calculated as follows:

UCC Balance	\$189,000
Lesser Of:	
Proceeds Of Disposition = \$210,000	
Capital Cost = \$286,000	( 210,000)
<u>Negative Ending UCC Balance = Recapture Of CCA</u>	<u>(\$ 21,000)</u>

John's Net Income For Tax Purposes will increase by \$21,000.

In this case, where the fair market value of the asset is less than its capital cost, ITA 13(7)(e) deems the transferee's capital cost of the transferred asset to be equal to the transferor's capital cost, an amount of \$286,000. This capital cost will be used for purposes of determining any capital gain and/or recapture on a future disposition.

The \$76,000 (\$286,000 - \$210,000) difference between this value and the transfer price will be considered deemed CCA. The resulting UCC balance of \$210,000 will be used by John's daughter for calculating future CCA.

Since John was taxed on the \$21,000 difference between his UCC of \$189,000 and the fair market value of \$210,000 as recapture, it makes economic sense that his daughter's UCC balance should be \$210,000.

## Solution to Assignment Problem Nine - 8

**Note To Instructor** Part B of this problem requires knowledge of ITA 13(21.1) as there is a capital gain on the land and a terminal loss on the building. This provision is covered in detail in Chapter 8.

### Case A(1)

Assuming that the transfer was to Margarett's spouse, the land would have been transferred at its cost and the building would have been transferred at its UCC. As a consequence, there would have been no tax effects to be included in Margarett's final return.

For CCA purposes, the building would have been transferred at Margarett's UCC of \$363,000. Given this, maximum CCA would be \$14,520 [(4%)(\$363,000)] for 2015 leaving a UCC of \$348,480. Since the acquisition of the building is a non-arm's length transaction, it was used and continues to be used to produce income and was owned for more than one year by Margarett, the half year rule does not apply to Gianni.

Note, however, that after the transfer, Gianni would have retained the building's old capital cost of \$473,000. Using this figure for the building, the tax effects that would occur at the time of the 2016 sale of the property would be as follows:

	<b>Land</b>	<b>Building</b>
Proceeds Of Disposition	\$160,000	\$525,000
Adjusted Cost Base/Capital Cost	( 150,000)	( 473,000)
Capital Gain	\$ 10,000	\$ 52,000
Inclusion Rate	1/2	1/2
Taxable Capital Gain	\$ 5,000	\$ 26,000
UCC		\$348,480
Deduct Disposition - Lesser Of:		
• Capital Cost = \$473,000		
• Proceeds Of Disposition = \$525,000		( 473,000)
Negative Closing UCC Balance = Recaptured CCA		(\$124,520)

A total of \$155,520 (\$5,000 + \$26,000 + \$124,520) would be added to the 2016 Net Income For Tax Purposes of Gianni. With the death of Margarett, there can be no income or capital gains attributed to her from Gianni.

### Case A(2)

As the transfer was to her daughter, Ciara, the deemed proceeds will be recorded at fair market value for the land and building. Based on this, the following calculations show the tax effects that will be included in Margarett's final return:

	<b>Land</b>	<b>Building</b>
Deemed Proceeds	\$175,000	\$571,000
Adjusted Cost Base/Capital Cost	( 150,000)	( 473,000)
Capital Gain	\$ 25,000	\$ 98,000
Inclusion Rate	1/2	1/2
Taxable Capital Gain	\$ 12,500	\$ 49,000

UCC	\$363,000
Deduct Disposition - Lesser Of:	
• Capital Cost = \$473,000	
• Deemed Proceeds = \$571,000	( 473,000)
<hr/>	
Negative Closing UCC Balance = Recaptured CCA	(\$110,000)
<hr/>	

A total of \$171,500 (\$12,500 + \$49,000 + \$110,000) would be added to Margarette’s 2015 Net Income For Tax Purposes.

With respect to Ciara’s tax records, the land will have a tax cost of \$175,000 and the building will be a Class 1 asset with a tax cost equal to Margarette’s deemed proceeds of \$571,000.

Maximum 2015 CCA is \$22,840 [(\$571,000)(4%)], leaving a UCC of \$548,160 (\$571,000 - \$22,840). Since the acquisition of the building is a non-arm’s length transaction, it was used and continues to be used to produce income and was owned for more than one year by Margarette, the half year rule does not apply to Ciara. In addition, ITA 13(7)(e), which requires the calculation of a limited UCC balance, is not applicable to transfers at death.

Since there cannot be a capital loss on depreciable property and the building is the only asset in the class, the 2016 tax effects associated with the sale of the building would be calculated as follows:

	Land	Building
Proceeds Of Disposition	\$160,000	\$525,000
Adjusted Cost Base	( 175,000)	
Capital Cost Limited To Proceeds		( 525,000)
<hr/>		
Capital Gain (Loss)	(\$ 15,000)	Nil
Inclusion Rate	1/2	N/A
<hr/>		
Allowable Capital Loss	(\$ 7,500)	Nil
<hr/>		

UCC	\$548,160
Deduct Disposition - Lesser Of:	
• Capital Cost = \$571,000	
• Proceeds Of Disposition = \$525,000	( 525,000)
<hr/>	
Positive Closing UCC Balance = Terminal Loss	\$ 23,160
<hr/>	

A total of \$30,660 (\$23,160 + \$7,500) would be deducted from the 2016 Net Income For Tax Purposes of Ciara as the problem indicates that she has sufficient income and taxable capital gains.

**Comparison Case A(1) And A(2)**

The overall tax consequences in the two cases are as shown in the following table:

	Case A(1) Gianni	Case A(2) Margarette	Case A(2) Ciara
2015	Nil	\$171,500	Nil
2015 - CCA Taken	(\$ 14,520)		(\$22,840)
2016	155,520		( 30,660)
<hr/>			
Net Income For Tax Purposes (Loss)	\$141,000	\$171,500	(\$53,500)
<hr/>			

There is a difference in the Case A(1) and Case A(2) results of \$23,000 [\$141,000 - (\$171,500 - \$53,500)]. This reflects the fact that, in Case A(2), a portion of the amount that was taxed as a capital gain (50 percent) in Margarette’s final return was deducted by Ciara as CCA and a terminal loss (100 percent).

This can be shown in the following calculation:

Actual Sale Price Of Building For Ciara	\$525,000
Fair Market Value (Deemed Proceeds) At Death	( 571,000)
Amount Deducted By Ciara As CCA And Terminal Loss*	(\$ 46,000)
Portion Taxed As Capital Gain In Final Return [(1/2)(\$46,000)]	23,000
Difference	(\$ 23,000)

**Part B**

If the proceeds of the sale of the property by Ciara were allocated \$300,000 to the land and \$385,000 to the building, the tax effects associated with the sale of the building would be initially calculated as follows:

	<b>Land</b>	<b>Building</b>
Proceeds Of Disposition	\$300,000	\$385,000
Adjusted Cost Base	( 175,000)	
Capital Cost Limited To Proceeds		( 385,000)
Capital Gain	\$125,000	Nil
Inclusion Rate	1/2	1/2
Taxable Capital Gain	\$ 62,500	Nil
UCC		\$548,160
Deduct Disposition - Lesser Of:		
• Capital Cost = \$571,000		
• Proceeds Of Disposition = \$385,000		( 385,000)
Positive Closing UCC Balance = Terminal Loss		\$163,160

Since there is a capital gain on the land and a terminal loss on the building, ITA 13(21.1)(a) requires the deemed proceeds of disposition for the building to be determined as follows:

The Lesser Of:

• The FMV of the land and building	\$685,000	
Reduced By The Lesser Of:		
• The ACB of the land = \$175,000		
• The FMV of the land = \$300,000	( 175,000)	<u>\$510,000</u>
• The Greater Of:		
• The FMV of the building = \$385,000		
• The Lesser Of:		
The cost of the building = \$571,000		
The UCC of the building = \$548,160		<u>\$548,160</u>

The proceeds that would be allocated to the building would be \$510,000, leaving \$175,000 (\$685,000 - \$510,000) to be allocated to the land. The net result is that the terminal loss would be reduced by \$125,000 (the amount of the potential capital gain) to \$38,160 (\$510,000 - \$548,160) and the capital gain would be nil (\$175,000 - \$175,000).

## Solution to Assignment Problem Nine - 9

### Part A

In the absence of an election by Jason not to have ITA 73(1) apply, the disposition will be deemed to have taken place at his tax values. These would be the \$123,000 adjusted cost base of the land and the \$299,772 UCC for the building. Note, however, Geena would retain the original capital cost of \$387,000. Given this information, the transfer would not result in any tax effects for either Jason or Geena Holt.

Based on this, the maximum CCA for 2015 was \$11,991 [(4%)(\\$299,772)]. Note that, because the acquisition of the building is a non-arm's length transaction, it was used and continues to be used to produce income and was owned for more than one year by Jason, the half year rule does not apply to Geena. This results in a 2015 net rental income of \$11,460 (\$23,451 - \$11,991). All of this would be attributed back to Jason.

When the property is sold on January 1, 2016, the income from the sale of the property would also be attributed to Jason. The relevant amount would be as follows:

	Land	Building
Proceeds Of Disposition	\$175,000	\$475,000
Adjusted Cost Base/Capital Cost	( 123,000)	( 387,000)
Capital Gain	\$ 52,000	\$ 88,000
Inclusion Rate	1/2	1/2
Taxable Capital Gain	\$ 26,000	\$ 44,000

As maximum CCA was deducted in 2015, the January 1, 2016 UCC balance would be \$287,781 (\$299,772 - \$11,991). Based on this, the disposition results in recapture as follows:

Capital Cost	\$387,000
UCC	( 287,781)
Recapture Of CCA	\$ 99,219

This would result in an increase in Jason Holt's 2016 Net Income For Tax Purposes of \$169,219 (\$26,000 + \$44,000 + \$99,219).

There would be no effect on Geena's Net Income For Tax Purposes in either year.

### Part B

The preceding result would be changed if Geena agrees to purchase the property at its fair market value. Provided Jason elects out of ITA 73(1), there will be no income attribution. Under this approach, the transfer would result in the following amounts of income for Jason.

	Land	Building
Deemed Proceeds Of Disposition	\$167,000	\$426,000
Adjusted Cost Base/Capital Cost	( 123,000)	( 387,000)
Capital Gain	\$ 44,000	\$ 39,000
Inclusion Rate	1/2	1/2
Taxable Capital Gain	\$ 22,000	\$ 19,500
Capital Cost		\$387,000
UCC		( 299,772)
Recapture Of CCA		\$ 87,228

This would result in an increase in Jason Holt's 2015 Net Income For Tax Purposes of \$128,728 (\$22,000 + \$19,500 + \$87,228).

As this was a non-arm's length transfer, ITA 13(7)(e) would be applicable. While Geena's capital cost for the building will be \$426,000, for CCA and recapture purposes, this value will be limited as follows:

Jason's Capital Cost		\$387,000
Jason's Proceeds Of Disposition	\$426,000	
Jason's Capital Cost	( 387,000)	
Difference	\$ 39,000	
Addition (= Jason's Taxable Capital Gain)	1/2	19,500
Capital Cost For CCA Purposes		\$406,500

Since the acquisition of the building is a non-arm's length transaction, it was used and continues to be used to produce income and was owned for more than one year by Jason, the half year rule does not apply to Geena.

Based on this, the maximum CCA for 2015 would be \$16,260 [(4%)(406,500)]. This would leave Geena with a 2015 net rental income of \$7,191 (\$23,451 - \$16,260). Since income attribution is not applicable in this case, Geena will include the net rental income in her Net Income For Tax Purposes.

The 2016 sale of the property will result in taxable capital gains, calculated as follows:

	Land	Building
Proceeds Of Disposition	\$175,000	\$475,000
Adjusted Cost Base/Capital Cost	( 167,000)	( 426,000)
Capital Gain	\$ 8,000	\$ 49,000
Inclusion Rate	1/2	1/2
Taxable Capital Gain	\$ 4,000	\$ 24,500

Based on the CCA that was taken in 2015, the January 1, 2016 UCC would be \$390,240 (\$406,500 - \$16,260). The recapture resulting from the disposition would be equal to the CCA taken by Geena. It would be calculated as follows:

January 1, 2016 UCC	\$390,240
Disposition - Lesser Of:	
Capital Cost For CCA Purposes = \$406,500	
Proceeds Of Disposition = \$475,000	( 406,500)
Negative Ending Balance = Recapture	(\$ 16,260)

**Comparison (Not Required)**

You might wish to note that, while the allocation of the income differs in Part A and Part B, the total amount of income is the same. This is shown in the following tables:

<b>Part A</b>	<b>Total Income</b>	<b>Rent + Recapture</b>	<b>Taxable Capital Gains</b>
Jason For 2015			
Net Rental Income	\$ 11,460	\$ 11,460	
Jason For 2016			
Taxable Capital Gains	70,000		\$70,000
Recapture	99,219	99,219	
<b>Total (No Income For Geena)</b>	<b>\$180,679</b>	<b>\$110,679</b>	<b>\$70,000</b>

<b>Part B</b>	<b>Total Income</b>	<b>Rent + Recapture</b>	<b>Taxable Capital Gains</b>
Jason For 2015			
Taxable Capital Gains	\$ 41,500		\$ 41,500
Recapture	87,228	\$ 87,228	
Geena For 2015			
Net Rental Income	7,191	7,191	
Geena For 2016			
Taxable Capital Gains	28,500		28,500
Recapture	16,260	16,260	
<b>Total</b>	<b>\$180,679</b>	<b>\$110,679</b>	<b>\$70,000</b>

## Solution to Assignment Problem Nine - 10

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### Tiffani

#### At Transfer

As Tiffani did not elect out of the ITA 73(1) spousal rollover, no income will result from the transfer to her spouse Hugh. However, there is no rollover for the transfer of public company shares to a related minor. This means there will be a taxable capital gain on the transfer of 14,000 shares to her son as follows:

Deemed Proceeds Of Disposition [(\$11)(14,000)]	\$154,000
Adjusted Cost Base [(\$10)(14,000)]	( 140,000)
Capital Gain	\$ 14,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 7,000

#### Dividends

As all of the shares were given to a spouse and a related minor, 100 percent of the dividends would be attributed back to Tiffani. Her increase in Net Income For Tax Purposes due to the dividends would be \$14,490 [(21,000)(138%)(0.50)].

#### Sale Of Shares

As there is no attribution of capital gains when shares are transferred to a related minor, the sale of shares by Tiffani's son would have no effect on her 2015 Net Income For Tax Purposes. However, the gain on the sale of shares by her spouse would be attributed back to Tiffani. The amount is calculated as follows:

Proceeds Of Disposition [(\$13)(7,000)]	\$91,000
Adjusted Cost Base [(\$10)(7,000)]	( 70,000)
Capital Gain	\$21,000
Inclusion Rate	1/2
Taxable Capital Gain	\$10,500

### Hugh

None of these transactions would have any effect on Hugh's 2015 Income For Tax Purposes.

### Mark

When Mark sells his shares, he will have a taxable capital gain calculated as follows:

Proceeds Of Disposition [(\$13)(14,000)]	\$182,000
Adjusted Cost Base [(\$11)(14,000)]	( 154,000)
Capital Gain	\$ 28,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 14,000

### If Tiffani Dies

Since Tiffani dies after the dividends are paid, but before Hugh sells his shares, the dividends will still be attributed back to Tiffani, but the taxable capital gain on the sale of Hugh's shares of \$10,500 will be taxed in Hugh's hands.

The taxable capital gain on the sale of Mark's shares is already being taxed in Mark's hands, so there would be no change in tax effects for Mark if Tiffani were to die.

## Solution to Assignment Problem Nine - 11

### **TD Bank Shares - Gift To Spouse**

Since Ms. Vaughn has not elected out of ITA 73(1), the TD Bank shares could be gifted to Jonathan with no immediate tax consequences.

The tax cost to Jonathan will be unchanged from her tax cost of \$550,000.

Any dividends on the shares will be attributed back to Ms. Vaughn.

If Jonathan sells the shares for \$800,000 (\$100,000 more than their fair market value at the time of the gift), the attribution rules of ITA 74.1(1) would apply. This would result in the following taxable capital gain being attributed to Ms. Vaughn at that time:

Proceeds Of Disposition	\$800,000
Adjusted Cost Base	( 550,000)
Capital Gain	\$250,000
Inclusion Rate	1/2
Taxable Capital Gain	\$125,000

### **TD Bank Shares - Gift To Children**

In the case of a transfer to either of her children, ITA 69 would require that the gift be treated as a deemed disposition with the proceeds at the fair market value of \$700,000. This would result in a taxable capital gain, as per the following calculation:

Deemed Proceeds Of Disposition	\$700,000
Adjusted Cost Base	( 550,000)
Capital Gain	\$150,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 75,000

The tax base to either of the children would be the fair market value of \$700,000.

If the shares were gifted to Vicky's 15 year old son Biff, any dividends on the shares would be attributed back to her.

There would be no income attribution if the shares were gifted to her 27 year old daughter.

If the shares were sold by either child for \$800,000, there would be no tax consequences for Ms. Vaughn.

However, the selling child would have a taxable capital gain calculated as follows:

Proceeds Of Disposition	\$800,000
Adjusted Cost Base	( 700,000)
Capital Gain	\$100,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 50,000

### **Vaughn Enterprises Ltd. - Gift To Spouse**

Since Ms. Vaughn has not elected out of ITA 73(1), the shares in Vaughn Enterprises Ltd. could be gifted to Jonathan with no immediate tax consequences.

The tax cost to Jonathan will be unchanged from her tax cost of \$475,000.

Any dividends on the shares will be attributed back to Ms. Vaughn.

Should Jonathan subsequently sell these shares for \$1,300,000 (\$100,000 more than their fair market value at the time of the gift), the attribution rules of ITA 74.1(1) would apply. This would result in the following taxable capital gain being attributed to Ms. Vaughn at that time:

Proceeds (Fair Market Value)	\$1,300,000
Adjusted Cost Base	( 475,000)
Capital Gain	\$ 825,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 412,500

### **Vaughn Enterprises Ltd. - Gift To Children**

There is no exemption from the general rules of ITA 69 for transfers of shares in a Canadian controlled private corporation to children. As a consequence, Ms. Vaughn would have a taxable capital gain calculated as follows:

Deemed Proceeds Of Disposition	\$1,200,000
Adjusted Cost Base	( 475,000)
Capital Gain	\$ 725,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 362,500

The adjusted cost base to either of the children would be the fair market value of \$1,200,000.

**Note To Instructor On Gift To Biff** Because dividends paid by private companies to individuals who are under 18 are subject to the tax on split income, such dividends would not be attributed back to Ms. Vaughan. However, the tax on split income is not covered until Chapter 11 of the text. Given this, indicating the dividends would be attributed back to Ms. Vaughan would be an acceptable alternative answer at this point in the text.

There would be no income attribution if the shares were gifted to her 27 year old daughter.

If the shares were subsequently sold by either child for \$1,300,000, there would be no tax consequences for Ms. Vaughn.

However, that child would have a taxable capital gain calculated as follows:

Proceeds Of Disposition	\$1,300,000
Adjusted Cost Base	( 1,200,000)
Capital Gain	\$ 100,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 50,000

### **Rental Property - Gift To Spouse**

Since Ms. Vaughn has not elected out of ITA 73(1), the rental property could be transferred to Jonathan with no immediate tax consequences.

The tax cost to Jonathan will be unchanged from her tax cost. The capital cost of the building would remain at \$1,200,000 (\$1,500,000 - \$300,000), the adjusted cost base of the land would remain at \$300,000, and the UCC of the building would be unchanged at \$960,000.

Any income on the property while it is held by her spouse would be attributed back to Ms. Vaughn.

At the time of a subsequent sale of the property by Jonathan Flex for \$2,500,000 (\$100,000 more than the building's fair market value at the time of the gift), the income attribution rules of ITA 74.1(1) would apply. This would result in the following amounts being attributed to Ms. Vaughn at that time:

	<b>Land</b>	<b>Building</b>
Proceeds Of Disposition	\$400,000	\$2,100,000
Adjusted Cost Base/Capital Cost	( 300,000)	( 1,200,000)
Capital Gain	\$100,000	\$ 900,000
Inclusion Rate	1/2	1/2
Taxable Capital Gain	\$ 50,000	\$ 450,000
Capital Cost Of Building		\$1,200,000
UCC		( 960,000)
Recapture Of CCA		\$ 240,000

### **Rental Property - Gift To Children**

There is no exemption from the general rules of ITA 69 for transfers of property to children. As a consequence, Ms. Vaughn would be subject to taxation based on a disposition of the property at its fair market value of \$2,000,000 for the building and \$400,000 for the land. This would result in the following amounts of income for Ms. Vaughn at the time of transfer.

	<b>Land</b>	<b>Building</b>
Proceeds Of Disposition	\$400,000	\$2,000,000
Adjusted Cost Base/Capital Cost	( 300,000)	( 1,200,000)
Capital Gain	\$100,000	\$ 800,000
Inclusion Rate	1/2	1/2
Taxable Capital Gain	\$ 50,000	\$ 400,000
Capital Cost Of Building		\$1,200,000
UCC		( 960,000)
Recapture Of CCA		\$ 240,000

The cost to either of the children for capital gains purposes would be \$2,000,000 for the building and \$400,000 for the land. For CCA and recapture purposes, the building's value would be limited to \$1,600,000 [ $\$1,200,000 + (1/2)(\$2,000,000 - \$1,200,000)$ ].

If the property was gifted to Vicky's 15 year old son Biff, any rental income on the property would be attributed back to her until Biff reaches 18 years of age.

There would be no income attribution if the property was gifted to her 27 year old daughter.

If the property was sold by either child, there would be no tax consequences for Ms. Vaughn.

However, if either child subsequently sold the building for \$2,100,000, there would be a taxable capital gain calculated as follows:

Proceeds Of Disposition	\$2,100,000
Adjusted Cost Base	( 2,000,000)
Capital Gain	\$ 100,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 50,000

This gain would be taxed in the children's hands. There would be no taxable capital gain on the sale of the land as its value is unchanged. As no CCA was taken on the building subsequent to the gift date, there would be no recapture of CCA.

**Farm Land - Gift To Spouse**

Since Ms. Vaughn has not elected out of ITA 73(1), the farmland could be transferred to Jonathan with no immediate tax consequences.

The tax cost to Jonathan will be unchanged from her tax cost of \$800,000.

Any income generated by the farm would be considered business income rather than property income. This means that it will not be subject to the income attribution rules and will be taxed in the hands of Jonathan.

In the event of a subsequent sale for \$1,300,000 (\$100,000 more than its fair market value at the time of the gift), the attribution rules of ITA 74.1(1) would apply. This would result in the following taxable capital gain being attributed to Ms. Vaughn at that time:

Proceeds Of Disposition	\$1,300,000
Adjusted Cost Base	( 800,000)
Capital Gain	\$500,000
Inclusion Rate	1/2
Taxable Capital Gain	\$250,000

**Farm Land - Gift To Children**

ITA 73(3) permits the transfer of farm property used by the taxpayer or her family to a child on a tax free basis. This means that there would be no tax consequences for Ms. Vaughn at the time of the gift to either child and the adjusted cost base to either child would be her tax cost of \$800,000.

Any income generated by the farm would be considered business income rather than property income. This means that it will not be subject to the income attribution rules and will be taxed in the hands of Ms. Vaughn's children.

If either child subsequently sold the property, there would be a taxable capital gain calculated as follows:

Proceeds Of Disposition	\$1,300,000
Adjusted Cost Base	( 800,000)
Capital Gain	\$ 500,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 250,000

If Biff sells the property, the gain would be attributed back to Ms. Vaughn. Note that, while there is usually no attribution of capital gains from minor children, there is an exception to this when farm property is transferred on a tax free basis.

If Sheila sells the property, the resulting gain would be taxed in her hands and not be attributed back to Ms. Vaughn.

## Solution to Assignment Problem Nine - 12

### Part A - Combined Base Tax Payable

In order to determine who should claim the medical expenses, the Taxable Income of both spouses is calculated first.

#### **Suzanne's Net And Taxable Income**

Suzanne's Net And Taxable Income would be calculated as follows:

UCCB	\$ 1,440
Net Business Income (Given)	67,260
Net Rental Income (Note 1)	Nil
Capital Gains (Note 1)	Nil
Recapture (Note 1)	Nil
Child Care Costs (Note 2)	( 8,500)
<b>Net Income For Tax Purposes And Taxable Income</b>	<b>\$60,200</b>

**Note 1** In 2014, when Spencer gifted the rental property to Suzanne, he did not elect out of ITA 73(1). This means that Suzanne would have received the property at its tax values. This would be a UCC of \$376,320, a capital cost of \$400,000 for the building, and an adjusted cost base for the land of \$100,000. Based on this, her 2014 deduction for CCA would be \$15,053 [(4%)(376,320)]. Note that, because the acquisition of the building is a non-arm's length transaction, it was used and continues to be used to produce income and was owned for more than one year by Spence, the half year rule does not apply.

Given this, the January 1, 2015 UCC for the building would be \$361,267 (\$376,320 - \$15,053).

The results of the 2015 sale are as follows:

	<b>Land</b>	<b>Building</b>
Proceeds Of Disposition	\$120,000	\$435,000
Adjusted Cost Base/Capital Cost	( 100,000)	( 400,000)
Capital Gain	\$ 20,000	\$ 35,000
Inclusion Rate	1/2	1/2
<b>Taxable Capital Gain</b>	<b>\$ 10,000</b>	<b>\$ 17,500</b>
		<b>Building</b>
January 1, 2015 UCC		\$361,267
Lesser Of:		
Capital Cost = \$400,000		
Proceeds Of Disposition = \$435,000		( 400,000)
Recapture		(\$ 38,733)

As no CCA will be taken for 2015 due to the sale, Suzanne's net rental income will be \$15,300. As Spencer did not elect out of ITA 73(1), income attribution would be applicable and the rental income will be included in his income.

Attribution of all income resulting from the sale will also be included in Spencer's 2015 tax return. This will result in an inclusion of \$81,533 (\$15,300 + \$10,000 + \$17,500 + \$38,733).

**Note 2** As Suzanne is the lower income spouse, she will generally deduct child care costs. However, during the 6 week period that she attended a designated educational institution, the costs can be deducted by Spencer. The relevant calculations are as follows:

	Spencer	Suzanne
Actual Costs And Periodic Cost Limit For Camp Weeks* [(48)(\$250)] + [(4)(2)(\$125)]	\$13,000	\$13,000
Annual Expense Limit [(2)(\$5,000)]	\$10,000	\$10,000
Periodic Expense Limit For Spencer [(6 Weeks)(\$125)(2)]	\$ 1,500	N/A
2/3 Of Earned Income [(2/3)(\$67,260)] [(2/3)(?)	?	\$44,840

\* The amount of camp costs allocated to the Children's Arts Credit is not relevant here as the remaining \$200 per week per child is more than the \$125 limit.

Since Spencer's Net Income has not yet been calculated in this solution, we do not have his earned income calculated. However, with his salary at \$85,500, two-thirds of this amount would be \$57,000, well in excess of his periodic limit or annual expense limit. As a result his accurate earned income is not needed in this calculation as two-thirds of it will not be the lowest figure.

The lowest figure for Spencer is the \$1,500 Periodic Expense Limit. Although Suzanne's tuition receipt states 2 months of full time attendance because a part month counts as a month, it is the 6 week length of the course that is used in this calculation.

For Suzanne the lowest figure is the Annual Expense Limit of \$10,000. This is reduced by the amount claimed by Spencer and she will deduct \$8,500 (\$10,000 - \$1,500). The total for deductible child care costs is less than the actual amount paid. Any amounts paid in the year that are not deductible are lost and cannot be carried forward.

### **Spencer's Net And Taxable Income**

Spencer's Net and Taxable Income would be calculated as follows:

Attributed From Suzanne (Note 1)	\$ 81,533
Child Care Costs (Note 2)	( 1,500)
Employment Income (Note 3)	95,216
Eligible Dividends Attributed From Twins (Note 4)	2,000
Gross Up On Eligible Dividends [(38%)(\$2,000)]	760
Taxable Capital Gains (Note 5)	3,250
Recapture On Farm Property (Note 6)	37,000
Moving Expenses (Note 7)	( 17,790)
TFSAs Contributions (Not Deductible)	Nil
RESP Contributions (Not Deductible)	Nil
<b>Net Income For Tax Purposes And Taxable Income</b>	<b>\$200,469</b>

**Note 3** Spencer's net employment income would be calculated as follows:

Salary	\$85,500
Registered Pension Plan Contributions	( 4,200)
Bonus (The Amount Received In 2015)	10,000
Automobile Benefit (Note 3A)	1,416
Gift Certificate (A Near Cash Gift)	1,000
Christmas Basket (Under \$500)	Nil
Meals And Entertainment (No Commission Income)	Nil
House Loss Reimbursement (Note 3B)	1,500
<b>Net Employment Income</b>	<b>\$95,216</b>

**Note 3A** Spencer's automobile benefit would be calculated as follows:

Standby Charge	
[(2/3)(\$523 - \$51)(11)(5,000 ÷ 18,337)]	\$ 944
Operating Cost Benefit - Lesser Of:	
[(1/2)(\$944)] = \$472	
[(0.27)(5,000)] = \$1,350	472
<b>Total Automobile Benefit</b>	<b>\$1,416</b>

**Note 3B** Under ITA 6(20), reimbursement for the loss on the sale of a home that results from a move only creates a taxable benefit if the amount is in excess of \$15,000. One-half of any excess over \$15,000 can be received without tax consequences. Given this, Spencer's taxable benefit is \$1,500 [ $\$18,000 - \$15,000 - (1/2)(\$18,000 - \$15,000)$ ].

**Note 4** The \$2,000 [(2)(\$1,000)] in eligible dividends received by the twins would be attributed to Spencer. However, there is no attribution of capital gains received by related minors. The \$1,000 [(2)(\$10,000 - \$9,500)] would be taxed in the hands of the twins.

**Note 5** While Spencer only received proceeds of \$5,000 for the shares he sold to his son, ITA 69 would deem the proceeds to be the fair market value of \$36,500. This would result in a taxable capital gain, calculated as follows:

Proceeds Of Disposition	\$36,500
Adjusted Cost Base	( 28,000)
Capital Gain	\$ 6,500
Inclusion Rate	1/2
<b>Taxable Capital Gain</b>	<b>\$ 3,250</b>

**Note 6** The fact that Spencer sold the farm to a non-arm's length party (his brother) will not affect the results as the proceeds of disposition were equal to the fair market value.

As the executors of his father's estate elected to use the \$375,000 fair market value of the land for the transfer to Spencer, there are no tax consequences for him resulting from his sale at this value. However, as the depreciable assets were farm assets so they could be transferred at tax values (UCC), Spencer will include the following amounts of recapture in his 2015 tax return:

Recapture On Building (\$275,000 - \$253,000)	\$22,000
Recapture On Equipment (\$110,000 - \$95,000)	15,000
<b>Total Recapture</b>	<b>\$37,000</b>

**Note 7** Spencer's deductible moving costs would be calculated as follows:

Real Estate Commissions - Old Home	\$11,620
Legal Fees - Old Home	1,250
Loss On Old Home	Nil
Unpaid Property Taxes - Old Home	Nil
Cleaning And Minor Repairs - Old Home	Nil
Legal Fees - New Home	1,460
Cost Of Moving Household Goods	3,460
<b>Total Moving Cost Deduction</b>	<b>\$17,790</b>

As the move took place in July, the income at the "new" work location would be more than adequate to cover this deduction.

### **Suzanne's Base Tax Payable**

As Suzanne income is below the medical expense income threshold of \$73,600 ( $\$2,208 \div 3\%$ ) while Spencer's income is well above it, and Suzanne has sufficient Tax Payable to utilize the medical expense credit, it is advantageous that she claim it.

Suzanne's Tax Payable would be calculated as follows:

Tax On First \$44,701		\$6,705
Tax On Remaining \$15,499 ( $\$60,200 - \$44,701$ ) At 22 Percent		3,410
<b>Tax Before Credits</b>		<b>\$10,115</b>
Non-Refundable Credits:		
Basic Personal	(\$11,327)	
CPP On Business Income (Maximum)	( 2,480)	
Education Related [\$2,000 + (2)( $\$400 + \$65$ )]	( 2,930)	
Medical Expenses (Note 8)	( 11,094)	
<b>Total</b>	<b>(\$27,831)</b>	
Rate	15%	( 4,175)
<b>Base Tax Payable</b>		<b>\$ 5,940</b>

**Note 8** It would appear that the brow lift for Suzanne is purely cosmetic in nature. As a consequence, it is not an eligible medical expense. Given this, the base for Suzanne's medical expense credit can be calculated as follows:

Total Eligible Medical Costs ( $\$21,500 - \$8,600$ )	\$12,900
Reduced By The Lesser Of:	
• $[(3\%)(\$60,200)] = \$1,806$	
• 2015 Threshold Amount = \$2,208	( 1,806)
<b>Allowable Medical Costs</b>	<b>\$11,094</b>

**Spencer's Base Tax Payable**

Spencer's Base Tax Payable would be calculated as follows:

Tax On First \$138,586		\$29,327
Tax On Next \$61,883 (\$200,469 - \$138,586) At 29 Percent		17,946
<hr/>		
Tax Before Credits		\$47,273
Non-Refundable Credits Other Than Donations:		
Basic Personal Amount	(\$11,327)	
Spousal (\$11,327 - \$60,200)	Nil	
El Premiums	( 931)	
CPP Contributions	( 2,480)	
Canada Employment	( 1,146)	
Transfer Of Charlton's Education Related Credits (Note 9)	Nil	
Children's Art Programs (Note 10)	( 1,000)	
First Time Home Buyers (Not A First Time Buyer)	Nil	
<hr/>		
Credit Base	(\$16,884)	
Rate	15%	( 2,533)
Charitable Donations Including FDSC [(15%)(\$200) + (29%)(\$8,400 - \$200) + (25%)(\$1,000)]		
<hr/>		( 2,658)
Spencer's Basic Tax Payable		\$42,082
<hr/>		

**Note 9** As explained in Note 5, ITA 69 deemed the proceeds of disposition for Spencer on the sale of shares to Charlton to be the fair market value of \$36,500. However, the adjusted cost base for Charlton is the amount paid for the shares of \$5,000. This would result in a taxable capital gain, calculated as follows:

Proceeds Of Disposition	\$42,000
Adjusted Cost Base	( 5,000)
<hr/>	
Capital Gain	\$37,000
Inclusion Rate	1/2
<hr/>	
Taxable Capital Gain - Charlton	\$18,500
<hr/>	

Charlton's total education related amounts are calculated as follows:

Tuition	\$6,300
Education [(4)(\$400)]	1,600
Textbook [(4)(\$65)]	260
<hr/>	
Total	\$8,160
<hr/>	

Charlton's Net Income For Tax Purposes and Taxable Income is equal to his taxable capital gain of \$18,500. Since his income is higher than the basic personal amount of \$11,327 by more than \$5,000, he cannot transfer any of his education related credits to Spencer. The sale of the shares to Charlton for less than fair market value has had an adverse effect on the taxes of Spencer and Charlton.

**Note 10** The per child amount for the Children's Arts Program is the lesser of \$500 and the eligible amount of \$950 (\$750 + \$200) per child. This gives a base of \$1,000 [(2)(\$500)].

**Combined Base Tax Payable**

The combined Base Tax Payable for Spencer and Suzanne would be \$48,022 (\$5,940 + \$42,082).

**Part B****The Required Transfer**

In calculating the combined Adjusted Base Tax Payable, the required transfer would be the lesser of \$50,000 and \$70,135  $[(\$200,469 - \$60,200) \div 2]$ . Using the lesser figure of \$50,000 would leave Spencer with a Adjusted Taxable Income of \$150,469, and Suzanne with an Adjusted Taxable Income of \$110,200.

**Suzanne's Adjusted Base Tax Payable**

Suzanne's Adjusted Base Tax Payable would be calculated as follows:

Tax On First \$89,401		\$16,539
Tax On Next \$20,799 (\$110,200 - \$89,401) At 26 Percent		5,408
<hr/>		
Tax Payable Before Credit		\$21,947
Non-Refundable Credits:		
Basic Personal	(\$11,327)	
CPP On Business Income (Maximum)	( 2,480)	
Education Related		
[\$2,000 + (2)(\$400 + \$65)]	( 2,930)	
Medical Expenses (Note 8)	( 11,094)	
Total	(\$27,831)	
Rate	15%	( 4,175)
<hr/>		
Suzanne's Adjusted Base Tax Payable		\$17,772
<hr/>		

**Spencer's Adjusted Base Tax Payable**

Spencer's Adjusted Base Tax Payable would be calculated as follows:

Tax On First \$138,586		\$29,327
Tax On Next \$11,883 (\$150,469 - \$138,586) At 29 Percent		3,446
<hr/>		
Tax Before Credits		\$32,773
Non-Refundable Credits Other Than Donations:		
Basic Personal Amount	(\$11,327)	
Spousal (\$11,327 - \$60,200)	Nil	
EI Premiums	( 931)	
CPP Contributions	( 2,480)	
Canada Employment	( 1,146)	
Transfer Of Charlton's Education		
Related Credits (Note 9)	Nil	
Children's Art Programs (Note 10)	( 1,000)	
<hr/>		
Credit Base Before Spousal Adjustment	(\$16,884)	
Spousal Adjustment (\$11,327 - \$60,200)	Nil	
<hr/>		
Credit Base	(\$16,884)	
Rate	15%	( 2,533)
<hr/>		
Charitable Donations Including FDSC		
[(15%)(\$200) + (29%)(\$8,400 - \$200) + (25%)(\$1,000)]		( 2,658)
<hr/>		
Spencer's Adjusted Basic Tax Payable		\$27,582
<hr/>		

Note that the non-refundable credits claimed for Suzanne and Spencer are the same as those used in the determination of Base Tax Payable (we have not duplicated the calculations here, but simply referred to the notes that were provided with the Base Tax Payable calculation). In this example, the spousal credit was nil, resulting in no adjustment of the non-refundable credits.

**Combined Adjusted Base Tax Payable**

The combined Adjusted Base Tax Payable would total \$45,354 (\$17,772 + \$27,582).

**Part C**

The Family Tax Cut for Spencer and Suzanne would be the lesser of \$2,000 and \$2,668 (\$48,022 - \$45,354). The lesser figure is \$2,000.

**Part D**

The combined Tax Payable for Spencer and Suzanne, after the application of the Family Tax Cut would be calculated as follows:

Suzanne's Tax Payable (Same As Base Tax Payable)	\$ 5,940
Spencer's Tax Payable Before The Family Tax Cut (Same As Base Tax Payable)	42,082
Family Tax Cut - Maximum	( 2,000)
Combined Tax Payable After The Family Tax Cut	\$46,022

## Solution to Assignment Problem Nine - 13

### Part A - Net Income For Tax Purposes And Taxable Income For Mr. Winded

The Net Income For Tax Purposes for Mr. Winded would be calculated as follows:

<b>Net Employment Income</b>		
Salary [(\$84,000)(2/12)]	\$14,000	
Standby Charge [(2/3)(\$360)(2)]	480	
Operating Cost Benefit [(90%)(3,000)(\$0.27)]		
(Alternate calculation not available)	729	
Taxable Portion Of Gift (\$700 - \$500)	200	
Stock Option Benefit [(1,500)(\$11 - \$8)]	4,500	
RPP Contributions	( 500)	\$ 19,409
<b>Net Business Income</b> (Note 1)		15,205
<b>Property Income</b>		
Interest Income	\$ 3,478	
Eligible Dividends Received	1,700	
Eligible Dividends Attributed From Mrs. Winded	1,400	
Gross Up [(38%)(1,700 + \$1,400)]	1,178	
Non-Eligible Dividends Received From Sail	800	
Gross Up [(18%)(800)]	144	
Net Rental Income (Note 2)	Nil	8,700
<b>Net Taxable Capital Gains</b>		
TCG On Sale Of Celebrate Ltd. Shares		
[(1/2)(1,000)(\$17 - \$11)]	\$ 3,000	
Attributed TCG On Sale Of Preferred Shares		
[(1/2)((31,000 - \$27,000)]	2,000	
TCG On Listed Personal Property		
Stamps (\$5,000 - \$8,000)	(\$3,000)	
Rare Book (\$4,200 - \$1,000)	3,200	
Painting (\$1,000 - \$1,000)	Nil	
	\$ 200	
Inclusion Rate	1/2	100
Loss On Furniture (PUP) Of \$3,800		
(\$4,800 - \$1,000 Floor) Not Deductible	Nil	
TCG On Sale Of Sail Shares		
[(1/2)(\$48,000 - \$12,000)]	18,000	
TCG On Sale Of CNR Shares (Note 3)	1,230	
ACL On Sale Of BCE Shares (Note 4)	( 400)	
TCG On Sale Of Cottage (Note 5)	50,000	73,930
<b>Other Income And Deductions</b>		
Old Age Security	\$ 5,350	
CPP Receipts	9,600	
Pension Income From Celebrate Ltd. Pension Plan	44,000	
RRIF Withdrawal	8,000	
Moving Expenses (Note 6)	( 23,000)	
Pension Income Transferred To Spouse		
[(1/2)(\$44,000 + \$8,000)]	( 26,000)	17,950
Net Income Before Clawback		\$135,194
OAS Clawback - Lesser Of:		
• Amount Received = \$5,350		
• \$9,358 [(15%)(135,194 - \$72,809)]	( 5,350)	
Net Income For Tax Purposes - Mr. Winded		\$129,844

**Note 1** Net Business Income would be calculated as follows:

Revenues		\$38,000
Expenses:		
Supplies	( 16,000)	
Advertising	( 1,000)	
Home Office Costs (See Following Calculation)	( 3,060)	
Terminal Loss - Class 45 (\$800 - \$200)	( 600)	
CCA		
Class 50 [(55%)(1/2)(\$3,800)]	(\$1,045)	
Class 8		
{[20%](\$2,400 + (1/2)(\$1,600))}	( 640)	
Class 12 [(100%)(\$450)]*	( 450)	( 2,135)
<b>Net Business Income</b>		<b>\$15,205</b>

\* As the two hand tools cost a total of \$450, each must have cost less than \$500. As a result, the first year one-half rule is not applicable.

The deductible home office costs can be calculated as follows:

Mortgage Interest	\$ 4,000
Utilities	3,600
Property Taxes	4,500
Insurance	1,400
Maintenance	1,800
<b>Total</b>	<b>\$15,300</b>
Floor Space Used	20%
<b>Deductible Amount</b>	<b>\$ 3,060</b>

**Note 2** Net Rental Income would be calculated as follows:

	<b>Property A</b>	<b>Property B</b>	<b>Total</b>
Rental Revenues	\$ 98,000	\$62,000	\$160,000
Operating Expenses	( 104,000)	( 54,000)	( 158,000)
Income (Loss) Before CCA	(\$ 6,000)	\$ 8,000	\$ 2,000
Class 8 CCA*			( 2,000)
<b>Net Rental Income</b>			<b>Nil</b>

\*Maximum CCA on Class 8 would have been \$5,600 [(20%)(12,000 + 16,000)]. However, the actual deduction is limited to the amount that would reduce the Net Rental Income to nil. Note that the CCA was claimed on Class 8 in order to preserve the Class 1 UCC balances. This will result in a lower amount of recapture when the buildings are sold. The Class 8 assets would likely have little or no proceeds of disposition when they are disposed of. This means that recapture on these assets would be unlikely.

**Note 3** - The taxable capital gain on the sale of CNR shares would be calculated as follows:

Proceeds Of Disposition [(\$67.00)(300)]	\$20,100
Adjusted Cost Base [(\$58.80*)(300)]	( 17,640)
Capital Gain	\$ 2,460
Inclusion Rate	1/2
<b>Taxable Capital Gain</b>	<b>\$ 1,230</b>

\*The average cost of these shares would be calculated as follows:

	Shares	Total	Per Share
May 1, 2011 Purchase At \$52	200	\$10,400	
May 1, 2012 Purchase At \$46	300	13,800	
Balance	500	\$24,200	\$48.40
May 1, 2013 Sale At Cost Of \$48.40 (\$24,200 ÷ 500)	(400)	( 19,360)	
Balance	100	\$ 4,840	\$48.40
May 1, 2014 Purchase At \$64	200	12,800	
Balance	300	\$17,640	\$58.80

**Note 4** The allowable capital loss on the sale of BCE shares would be calculated as follows:

Proceeds Of Disposition [(1,000)(\$36)]	\$36,000
Adjusted Cost Base [(1,000)(\$38)]	( 38,000)
Capital Loss	(\$ 2,000)
Capital Loss Per Share (\$2,000 ÷ 1,000)	\$2 Loss/Share

As 600 of the shares were reacquired within 30 days of the sale, with respect to these 600 shares, the capital loss is considered a superficial loss and is disallowed. This will leave an allowable capital loss of \$400 [(1/2)(\$2)(400)]. The remaining capital loss of \$1,200 [(2)(600)] will be added to the adjusted cost base of the 600 reacquired shares.

**Note 5** The taxable capital gain on the sale of the cottage would be calculated as follows:

	Winnipeg Home	Lake Winnipeg Cottage
Proceeds Of Disposition	\$300,000	\$290,000
Selling Costs	Nil*	( 10,000)
Adjusted Cost Base	( 140,000)	( 80,000)
Capital Gain	\$160,000	\$200,000
Exempt Portion		
Home	( 160,000)	
Cottage		( 100,000)
Capital Gain Inclusion Rate	Nil	\$100,000 1/2
Taxable Capital Gain	Nil	\$ 50,000

\* The costs of selling a previously occupied residence that was ordinarily inhabited can be deducted as part of moving expenses. However, it cannot also be used to reduce the capital gain. As stated in the problem, Mr. Winded deducts the selling costs on the house as a moving cost.

The annual gain on the home is \$16,000 (\$160,000 ÷ 10), larger than the \$12,500 (\$200,000 ÷ 16) annual gain on the cottage. This means that the maximum available years should be allocated to the home. With the plus one in the formula, the 9 years 2007 through 2015 will provide an exemption equal to the total gain {[\$160,000][(9 + 1) ÷ 10]}.

This leaves the 7 years 2000 through 2006 for the cottage. This will provide an exempt portion of \$100,000  $\{[\$200,000][7 + 1] \div 16\}$ , leaving a capital gain of \$100,000 and a taxable amount of \$50,000.

**Note 6** As there is no income in the Vancouver location during 2014, the moving expenses incurred in that year will have to be deducted in 2015. None of the costs of the house hunting trip are deductible. The eligible moving expenses that were incurred in 2014 and 2015 are as follows:

Legal Fees - Purchase Of New Home	\$ 4,800
January Air Fare	1,200
Selling Costs - Sale Of Old Home	13,000
Transport Of Household Effects	4,000
<b>Total Available Moving Expenses</b>	<b>\$23,000</b>

These expenses can only be deducted to the extent of employment and business income earned during 2015. As these two amounts total \$34,614 (\$19,409 + \$15,205), the full amount of eligible expenses can be deducted.

**Part A - Taxable Income For Mr. Winded**

Taxable Income for Mr. Winded would be calculated as follows:

Net Income For Tax Purposes	\$129,844
Stock Option Deduction $[(\$4,500)(1/2)]$	( 2,250)
<b>Taxable Income - Mr. Winded</b>	<b>\$127,594</b>

**Part A - Net Income For Tax Purposes And Taxable Income For Mrs. Winded**

Mrs. Winded has no Taxable Income deductions. This means that her Taxable Income is equal to her Net Income For Tax Purposes which would be calculated as follows:

Old Age Security	\$ 6,800
Canada Pension Plan	3,100
Transferred Pension Income	26,000
Dividends (Attributed Back To Mr. Winded)	Nil
<b>Net Income For Tax Purposes = Taxable Income - Mrs. Winded</b>	<b>\$35,900</b>

**Part B - Federal Balance Owing (Tax Payable) For Mrs. Winded**

While the medical expenses can be claimed by either spouse, they are claimed on Mrs. Winded's return as she has the lower Net Income For Tax Purposes. This results in a lesser reduction of the medical expenses claimed in the computation of the credit. She does have sufficient Tax Payable to fully utilize the credit.

Mrs. Winded's federal Tax Payable would be calculated as follows:

Tax Before Credits [(15%)(\$35,900)]		\$5,385
Tax Credits:		
Basic	(\$11,327)	
Age (Note 7)	( 6,968)	
Disability	( 7,899)	
Pension Amount	( 2,000)	
Medical Expenses (Note 8)	( 2,473)	
Total Credit Base	\$30,667	
Rate	15%	( 4,600)
Federal Tax Payable		\$ 785

**Note 7** The base for the age credit is calculated as follows:

Basic Amount		\$7,033
Reduction - Lesser Of:		
• \$7,033		
• [(15%)(\$35,900 - \$35,466)] = \$65	( 65)	
Base For Age Credit		\$6,968

**Note 8** The base for the medical expense credit is calculated as follows:

Total Medical Expenses (\$150 + \$4,600 - \$1,200)		\$3,550
Reduction - Lesser Of:		
• [(3%)(\$35,900)] = \$1,077		
• \$2,208	( 1,077)	
Base For Medical Expense Credit		\$2,473

**Part B - Federal Tax Payable For Mr. Winded**

As Mrs. Winded has fully utilized her credits, there are none to be transferred to Mr. Winded. The Federal Balance Owing for Mr. Winded would be calculated as follows:

Tax On First \$89,401		\$16,539
Tax On Next \$38,193 (\$127,594 - \$89,401) At 26 Percent		9,930
Tax Before Credits		\$26,469
Tax Credits		
Basic	(\$11,327)	
Spousal (Income Exceeds \$13,420)	Nil	
Age (Income Exceeds \$82,353)	Nil	
Pension Amount	( 2,000)	
CPP	( 700)	
EI	( 200)	
Canada Employment	( 1,146)	
Total Credit Base	(\$15,373)	
Rate	15%	( 2,306)
Charitable Donations		
[(15%)(200) + (29%)(3,700 - 200)]		( 1,045)
Dividend Tax Credits		
Eligible Dividends [(6/11)(1,178)]		( 643)
Sail Ltd. Dividends [(13/18)(144)]		( 104)
Federal Tax Payable		\$22,371
OAS Repayment		5,350
Total Balance Owing		\$27,721

## CHAPTER TEN SOLUTIONS

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### Solution to Assignment Problem Ten - 1

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#### Case 1

The required 2015 PA would be calculated as follows:

Employer's Contribution To DPSP	\$2,500
Employer's Contribution To RPP	1,000
Fredia's Contribution To RPP	1,000
<hr/>	
PA	\$4,500
<hr/>	

#### Case 2

The required 2015 PA would be calculated as follows:

$$[(1.25\%)(9)(\$71,000)] = \$7,988$$

Note that the contributions made during 2015 have no influence on the PA for a defined benefit RPP.

#### Case 3

The required PSPA would be calculated as follows:

2013 Amount $[(1.1\%)(9)(\$38,000)]$	\$3,762
2014 Amount $[(1.1\%)(9)(\$42,000)]$	4,158
<hr/>	
2015 PSPA	\$7,920
<hr/>	

In addition to the PSPA calculated above, there would be a 2015 PA of \$5,049  $[(1.1\%)(9)(\$51,000)]$ .

#### Case 4

The required PAR would be calculated as follows:

2013 PA	\$ 5,200
2014 PA	5,400
<hr/>	
2015 PAR	\$10,600
<hr/>	

#### Case 5

The required PSPA would be calculated as follows:

2013 Amount $[(1.5\% - 1.3\%)(9)(\$58,000)]$	\$1,044
2014 Amount $[(1.5\% - 1.3\%)(9)(\$62,000)]$	1,116
<hr/>	
2015 PSPA	\$2,160
<hr/>	

There would also be a 2015 PA. However, this cannot be calculated as the problem does not provide the 2015 pensionable earnings.

## Solution to Assignment Problem Ten - 2

### Part A - Maximum RRSP Deduction

Deeta's maximum 2015 RRSP deduction would be calculated as follows:

Unused Deduction Room - January 1, 2014	\$35,000
2014 Addition	Nil
2015 Addition (Based On 2014 Earned Income Of Nil)	Nil
<u>Maximum 2015 RRSP Deduction</u>	<u>\$35,000</u>

### Part B - Excess RRSP Contributions

At the beginning of 2014, Deeta's undeducted contributions of \$37,000 are equal to her \$35,000 unused deduction room, plus the permitted \$2,000 cushion. As there are no further contributions during 2014, there are no excess contributions during the 2014 taxation year.

The excess contributions for 2015 would be calculated as follows:

Undeducted Contributions	
January 1, 2015 (\$37,000 - \$25,000)	\$12,000
Additional Contribution On May 2, 2015	40,000
<u>Total Undeducted Contributions</u>	<u>\$52,000</u>
Unused Deduction Room	( 35,000)
Permitted Cushion	( 2,000)
<u>Excess Contributions Subject To Penalty</u>	<u>\$15,000</u>
Penalty Rate	1%
Monthly Penalty	\$ 150
Months (May To December)	8
<u>Total Penalty</u>	<u>\$ 1,200</u>

### Part C - Advice On Tax Planning

As the preceding calculation demonstrates, Deeta's excess contributions are attracting a significant penalty, based on a monthly charge of 1 percent of the excess amount.

Since her earned income for 2015 will only be \$61,000, she will still have excess contributions of \$2,020 [ $\$13,000 - (\$61,000)(18\%)$ ] for 2015. If the excess contributions are withdrawn from the RRSP prior to the end of the year following the year in which an assessment is received for the year in which the contribution is made, an offsetting deduction is available. If, however, any excess is not withdrawn within this specified time frame, it will be included in income and taxed on withdrawal, even though it was never deducted from income.

Deeta should withdraw the \$2,020 immediately to stop the assessment of the penalty.

Since she has never had a TFSA, she should open one. The withdrawn funds should be contributed to her TFSA, along with any other excess funds up to her TFSA contribution room. For 2015, the maximum total contributions would be \$41,000 and, while TFSA contributions are not deductible, earnings accumulate on a tax free basis. In addition, withdrawals can be made without tax consequences.

Whether Deeta should withdraw the \$2,000 cushion as well depends on future expectations. As there is no time limit on using contributions that are in the plan, it would make sense to simply leave the \$2,000 in place, provided that she expects to have earned income in some future year.

In the future, she should ensure that she continues to contribute to her RRSP and TFSA, but should limit the amounts to the maximum permitted contribution.

## Solution to Assignment Problem Ten - 3

### Part A

Jeff's Net Income For Tax Purposes would be calculated as follows:

Income Under ITA 3(a):		
Net Employment Income	\$59,000	
Interest	2,300	
Eligible Dividends	1,400	
Gross Up [(38%)(\$1,400)]	532	
Royalties	5,000	
Spousal Support Received	12,000	
Child Support Received (Non-Taxable)	Nil	\$ 80,232
<hr/>		
Income Under ITA 3(b):		
Taxable Capital Gains	\$62,000	
Allowable Capital Losses	( 6,000)	56,000
<hr/>		
Balance From ITA 3(a) And (b)		\$136,232
Subdivision e Deductions		
Spousal Support Paid	(\$24,000)	
Child Care Costs	( 5,000)	( 29,000)
<hr/>		
Balance From ITA 3(c)		\$107,232
Deductions Under ITA 3(d):		
Net Rental Loss		( 27,200)
<hr/>		
Net Income For Tax Purposes		\$ 80,032

The capital loss carry forward would affect his Taxable Income only.

### Part B

Jeff's 2014 Earned Income would be calculated as follows:

Net Employment Income	\$59,000
Add Back RPP Contributions	1,500
Royalties (Taxpayer's Own Work)	5,000
Spousal Support Received	12,000
Spousal Support Paid	( 24,000)
Net Rental Loss	( 27,200)
<hr/>	
Earned Income	\$26,300

Given this, his maximum 2015 contribution would be calculated as follows:

Unused Deduction Room - End Of 2014	\$18,000
Annual Addition - Lesser Of:	
• 2015 RRSP Dollar Limit = \$24,930	
• 18% of 2014 Earned Income Of \$26,300 = \$4,734	4,734
Less 2014 PA (\$1,500 + \$1,500 + \$1,000)	( 4,000)
<hr/>	
2015 RRSP Deduction Limit	\$18,734
Allowable Excess Amount	2,000
<hr/>	
Non-Penalty Contribution Limit	\$20,734
Undeducted Contributions From Previous Years	( 20,000)
<hr/>	
Maximum RRSP Contribution	\$ 734

If Jeff contributes this amount of \$734, his deduction will be equal to \$18,734 and he will carry forward RRSP contributions of \$2,000 (\$20,000 + \$734 - \$18,734).

**Part C**

With the additional \$175,000 of business income, Jeff's earned income would be calculated as follows:

Net Employment Income	\$59,000
Add Back RPP Contributions	1,500
Royalties	5,000
Spousal Support Received	12,000
Spousal Support Paid	( 24,000)
Net Rental Loss	( 27,200)
Net Business Income	175,000
<b>Earned Income</b>	<b>\$201,300</b>

Given this, his maximum 2015 contribution would be calculated as follows:

Unused Deduction Room - End of 2014	\$18,000
Annual Addition - Lesser Of:	
• 2015 RRSP Dollar Limit = \$24,930	
• 18% of 2014 Earned Income Of \$201,300 = \$36,234	24,930
Less 2014 PA (\$1,500 + \$1,500 + \$1,000)	( 4,000)
2015 RRSP Deduction Limit	\$38,930
Allowable Excess Amount	2,000
Non-Penalty Contribution Limit	\$40,930
Undeducted Contributions From Previous Years	( 20,000)
<b>Maximum RRSP Contribution</b>	<b>\$20,930</b>

If Jeff contributes the amount of \$20,930, his deduction will be equal to \$38,930 and he will carry forward RRSP contributions of \$2,000 (\$20,000 + \$20,930 - \$38,930).

## Solution to Assignment Problem Ten - 4

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### Part A

Ms. Wheeler's net employment income for 2014 would be \$20,800, her gross salary of \$22,000, reduced by her RPP contributions of \$1,200.

### Part B

The annual addition for 2015 would be the lesser of \$24,930 and 18 percent of Earned Income for 2014. The latter amount would be calculated as follows:

Net Employment Income (Part A)	\$20,800
Add Back RPP Contributions	1,200
Spousal Support Received [(6)(\$1,200)]	7,200
Net Business Loss	( 2,500)
<hr/>	
Earned Income	\$26,700
Percent	18%
<hr/>	
Annual Addition (Less than \$24,930)	\$ 4,806
<hr/> <hr/>	

Ms. Wheeler's maximum deductible RRSP contribution would be calculated as follows:

Opening Unused Deduction Room	Nil
Annual Addition	\$ 4,806
Less 2014 PA (\$1,200 + \$1,200)	( 2,400)
<hr/>	
Maximum Deductible RRSP Contribution	\$ 2,406
<hr/> <hr/>	

### Part C

As Ms. Wheeler has made no contributions prior to 2015, she has no undeducted contributions. In addition, she has interest income and dividends that are subject to current Tax Payable. Given this, as well as the fact that her lump-sum payment of \$80,000 and \$50,000 inheritance leaves her with cash in excess of her needs, she should contribute the maximum deductible amount of \$2,406 for 2015.

While she could deduct the \$2,406 in 2015, it would be advantageous to defer this deduction until 2016 when she expects to be in a higher tax bracket. At the federal level, the tax savings will be \$626 [(26%)(2,406)] in 2016, as compared to \$361 [(15%)(2,406)] in 2015.

Given her available funds, Ms. Wheeler should be advised to consider contributing the maximum allowable amount to a Tax Free Savings Account, as well as over contributing up to \$2,000 to her RRSP.

How much she should contribute to a TFSA and overcontribute to her RRSP would depend on a number of factors as discussed in Chapter 10. Although she would not be able to deduct these contributions, they would enjoy the benefit of having any income earned while in the plan compounded on a tax free basis. An over contribution to her RRSP would be deductible in a future year with sufficient RRSP deduction room.

All of these contributions should be made as soon as possible in order to maximize the tax free earnings that will accrue inside of her RRSP and/or TFSA.

## Solution to Assignment Problem Ten - 5

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### Part A

For purposes of determining her maximum 2015 RRSP contribution, 2014 Earned Income would be calculated as follows:

Net Employment Income*		
Salary	\$150,000	
Automobile Benefit	6,500	
Employee Stock Option Benefit	3,000	
Benefit On Interest Free Loan	1,500	
Deductible Employment Expenses	( 3,400)	\$157,600
Business Income		14,600
Royalty Income (Own Invention)		6,600
Rental Loss		( 10,000)
Spousal Support Received		24,000
Earned Income		<u>\$192,800</u>

\* Note that, in calculating Earned Income for RRSP purposes, no deduction is made from net employment income for contributions made to an RPP.

A listing of the items that are not included in the calculation of Earned Income is as follows:

- Registered Pension Plan Contributions
- Interest Income
- Taxable Capital Gains
- Non-Eligible Dividends

### Part B

The calculation of Sherly's maximum deductible RRSP contribution for 2015 is as follows:

2013 RRSP Dollar Limit	\$23,820
2014 RRSP Dollar Limit	24,270
Opening Unused RRSP Deduction Room	\$48,090
Annual Addition - Lesser Of:	
• 2015 RRSP Dollar Limit = \$24,930	
• 18 Percent Of 2014 Earned Income	
[(18%)(\$192,800)] = \$34,704	24,930
2014 PA	( 15,000)
Maximum Deductible RRSP Contribution For 2015	<u>\$58,020</u>

## Solution to Assignment Problem Ten - 6

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### Part A

Minimum Net Income For Tax Purposes would be calculated as follows:

Business Income	
Accounting Net Income	\$183,000
Additions:	
Accounting Amortization	23,000
Recapture (Note 1)	12,000
Meals And Entertainment (Note 2)	7,000
Deductions:	
Maximum CCA (Given)	( 31,000)
Accounting Gain On Asset Sale (\$34,500 - \$24,000)	( 10,500)
<u>Net Business Income</u>	<u>\$183,500</u>
Property Income	
Interest	1,200
Royalties	8,400
Taxable Capital Gains	
Taxable Capital Gain On Depreciable Assets (Note 3)	2,250
Taxable Capital Gain On Personal Assets	18,000
Allowable Capital Loss On Sale Of Shares	( 1,000)
Other Deductions	
Spousal Support Paid	( 3,600)
<u>2015 Net Income Before RRSP Deduction</u>	<u>\$208,750</u>

**Note 1** Recapture of CCA would be calculated as follows:

UCC - January 1, 2015	\$18,000
Reduced By The Lesser Of:	
Capital Cost = \$30,000	
Proceeds Of Disposition = \$34,500	( 30,000)
<u>Negative Ending UCC Balance = Recapture Of CCA</u>	<u>(\$12,000)</u>

**Note 2** As only one-half of the \$14,000 in deducted business meals and entertainment that were deducted in determining accounting Net Income can be deducted for tax purposes, \$7,000  $[(1/2)(\$14,000)]$  must be added back to accounting Net Income to arrive at Net Business Income.

**Note 3** The taxable capital gain would be calculated as follows:

Depreciable Assets - Proceeds Of Disposition	\$34,500
Capital Cost	30,000
<u>Capital Gain On Depreciable Assets</u>	<u>\$ 4,500</u>
Inclusion Rate	1/2
<u>Taxable Capital Gain</u>	<u>\$ 2,250</u>

**Part B**

Given that we are asked to assume the Alicia's 2014 Earned Income is equal to her 2015 Earned Income, we will need to calculate the 2015 figure. The calculations are as follows:

Net Business Income	\$183,500
Royalties (Taxpayer Was Author)	8,400
Spousal Support Paid	( 3,600)
<u>Earned Income For RRSP Purposes</u>	<u>\$188,300</u>

Using this information, the maximum RRSP deduction for 2015 would be calculated as follows:

Unused Deduction Room - January 1, 2015	\$ 6,500
Lesser Of:	
2015 RRSP Limit = \$24,930	
[(18%)(\$188,300)] = \$33,894	24,930
PA	N/A
<u>Maximum RRSP Deduction For 2015</u>	<u>\$31,430</u>

The required amount of additional contributions would be calculated as follows:

Maximum 2015 Deduction	\$31,430
Undeducted Contributions at January 1	( 4,500)
<u>Required Additional Contributions</u>	<u>\$26,930</u>

## Solution to Assignment Problem Ten - 7

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### **Retiring Allowance Rollover**

If Mr. White accepts his employer's offer of cash, he has two alternative courses of action. First, he can do nothing, in which case the full \$68,000 will be an addition to his Net Income For Tax Purposes for the current year. His second alternative will be to transfer some part of the payment to a Registered Retirement Savings Plan (RRSP) on a tax free basis. While he will still have to include the full \$68,000 in his income, he will be eligible for a deduction equal to a specified amount of such transfers.

The rules prior to 1989 permit tax free transfers of up to \$2,000 per year of service with the employer who is making the payments, plus an additional \$1,500 per year of service for each year during which the employer was not making vested contributions to either a Registered Pension Plan or a Deferred Profit Sharing Plan. For 1989 through 1995, the amount of this transfer is limited to \$2,000 per year of post-1988 service. For service after 1995, the transfer is no longer available.

In 2015, Mr. White's limit would be \$31,500 [(12 years)(\$2,000) + (5 years)(\$1,500)]. The excess of \$36,500 (\$68,000 - \$31,500) will be taxed in the year in which it is received.

### **Alternatives Available**

As to the appropriate course of action, it depends on Mr. White's circumstances. If he anticipates finding another job within a short period of time and has no immediate need for the additional cash, the tax free transfer to an RRSP is probably the most appropriate course of action. He could use the excess retiring allowance to make his maximum regular RRSP contribution.

Although he could make a non-deductible RRSP contribution of up to \$2,000 without being assessed any penalty, there are other alternative savings plans available to him. If he has available funds, he should consider contributions to an RESP for the triplets and TFSAs for himself and his wife.

On the other hand, if he wishes to take some time off, or is uncertain as to his future job prospects, he may wish to retain all of the cash on a personal basis. Note, however, if the offer is accepted late in the year after Mr. White has received most of his annual income, the retention of the additional \$68,000 would likely push Mr. White into the highest tax bracket. This could be avoided by putting the maximum of \$31,500 into an RRSP, with funds withdrawn as needed in the following year.

Another possibility is that Mr. White is at or near retirement age. If this is the case, he will probably wish to transfer the maximum of \$31,500 to an RRSP in order to gain flexibility in terms of when the income will be taxed during his retirement years.

If the funds are subsequently transferred to a RRIF or withdrawn from the RRSP in the form of an annuity, the payments will be eligible for the pension income tax credit after Mr. White reaches age 65. The RRIF and annuity payments will also be eligible for the pension income splitting provisions (see Chapter 9).

As a final note, if Mr. White chooses to make a tax free transfer to an RRSP, the transaction does not change his RRSP Deduction Limit for the year. That is, the maximum deductible RRSP contribution for 2015 will be the same, whether or not he transfers part of the retiring allowance into his plan.

## Solution to Assignment Problem Ten - 8

### Part A

#### Aldo's Business Income

Aldo's minimum net business income for the year ending December 31, 2015 can be calculated as follows:

<b>Aldo Broome</b>	
<b>Statement Of Business Income</b>	
<b>For Year Ending December 31, 2015</b>	
Revenue Collected	\$321,000
Increase In Billed Receivables (\$105,000 - \$92,000)	13,000
<hr/>	
Total Revenue (Note 1)	\$334,000
<hr/>	
Vehicle Operating Costs [(\$4,800)(29,000 ÷ 32,000)]	\$ 4,350
Building Operating Costs	24,300
Payments To Staff	42,000
Miscellaneous Office Costs	17,500
Business Meals [(50%)(15,300)]	7,650
CCA (Note 2)	55,488
CEC (Note 3)	2,153
<hr/>	
Total Expenses	\$153,441
<hr/>	
Net Business Income	\$180,559
<hr/>	

**Note 1** As Aldo is a professional accountant he is eligible for the special rule under ITA 34 which allows him to recognize revenue on a billed basis. This means that he does not have to include his unbilled work-in-progress in his net business income.

**Note 2** The total CCA deductible would be as follows:

Class 1 (Calculation Follows)	\$25,901
Class 8 (Calculation Follows)	24,157
Class 50 (Calculation Follows)	330
Class 12 (Calculation Follows)	1,022
Class 10.1 (Calculation Follows)	4,078
<hr/>	
Total CCA	\$55,488
<hr/>	

**Class 1** As the building is used 100 percent for non-residential purposes, it is eligible for the enhanced rate of 6 percent. The maximum CCA would be:

Class 1 [(\$431,676)(6%)]	\$25,901
<hr/>	

**Class 8** The required calculations are as follows:

Opening Balance		\$ 34,284
Additions	\$204,000	
Disposal - Lesser Of:		
• Proceeds = \$31,000		
• Cost = \$93,000	( 31,000)	173,000
<hr/>		
One-Half Net Additions [(1/2)(\$173,000)]		( 86,500)
<hr/>		
CCA Base		\$120,784
Rate		20%
<hr/>		
Class 8 CCA		\$ 24,157
<hr/>		

**Class 50** The CCA on the new computer would be calculated as follows:

Class 50 $[(1/2)(55%)(\$1,200)]$	\$330
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**Class 12** The CCA on the applications software would be calculated as follows:

Class 12 $[(\$2,044)(1/2)(100%)]$	\$1,022
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**Class 10.1** As the car cost more than \$30,000, it must be put into a separate Class 10.1. The addition is limited to \$30,000. The deductible CCA is reduced by the personal usage of the car and would be calculated as follows:

Maximum Class 10.1 CCA $[(30\%)(1/2)(\$30,000)]$	\$4,500
Personal Usage $[(3,000/32,000)(\$4,500)]$	( 422)
Deductible Class 10.1 CCA	\$4,078

**Note 3** Three-quarters of the \$41,000 cost of the client list would be allocated to Cumulative Eligible Capital. The CEC deduction would be \$2,153  $[(\$41,000)(3/4)(7\%)]$ .

**Aldo's Investment Income**

Aldo's investment income would be calculated as follows:

Taxable Capital Gains $[(1/2)(\$22,960)]$	\$11,480
Eligible Dividends	8,500
Gross Up On Eligible Dividends $[(38\%)(\$8,500)]$	3,230
Interest Income	5,500
Total Investment Income	\$28,710

**Cynthia's Employment Income**

Cynthia's net employment income would be calculated as follows:

Salary	\$55,000
Additions:	
Travel Allowances (Note 4)	
Hotels And Food	Nil
Use Of Personal Automobile	5,200
Deductions:	
Hotels And Food (Note 4)	Nil
Automobile Costs (Note 5)	( 6,969)
RPP Contributions	( 2,500)
Net Employment Income	\$50,731

**Note 4** Given her actual costs, the allowance for hotels and food seems reasonable. This means it does not have to be included in income. However, this will prevent Cynthia from deducting her actual costs which total to more than the allowance. With respect to the allowance for personal use of her automobile, it is not based on kilometers driven and this means it cannot be considered "reasonable". It must be included in income.

**Note 5** Her deductible automobile costs would be calculated as follows:

Operating Costs	\$3,465
CCA On Class 10.1 $[(1/2)(30\%)(\$30,000)]^*$	4,500
<hr/>	
Total Automobile Costs	\$7,965
Personal Usage $[(\$7,965)(4,500 \div 36,000)]$	( 996)
<hr/>	
Total Deductible Costs	\$6,969
<hr/>	

\*The luxury car rules for Class 10.1 limit the capital cost of the car to \$30,000.

### **Aldo's Net And Taxable Income**

Aldo's Net Income For Tax Purposes for 2015 would be calculated as follows:

Net Business Income	\$180,559
Investment Income	28,710
Spousal RRSP Attribution (Note 6)	5,000
Home Buyers' Plan Inclusion (Note 7)	1,000
RRSP Deduction (Note 8)	( 33,140)
Deductible CPP Contributions $[(1/2)(\$4,960)]$ (Note 9)	( 2,480)
<hr/>	
Net Income For Tax Purposes	\$179,649
<hr/>	

**Note 6** As Aldo's contribution to Cynthia's plan occurred in one of the two years prior to her withdrawal of \$7,000, the \$5,000 amount of his contribution will be included in his Net Income For Tax Purposes. The fact that he deducted the contribution in 2012 does not affect the required attribution.

**Note 7** Aldo's 2012 Home Buyers' Plan withdrawal was \$25,000. While no repayment was required until 2014, he made a voluntary repayment of \$10,000 in 2013, reducing the outstanding balance to \$15,000. Based on this, he should have made a repayment in 2014 of \$1,000  $(\$15,000 \div 15)$ . As he didn't make a payment, this \$1,000 was added to his 2014 Net Income For Tax Purposes and deducted from the required Home Buyers' Plan balance. The required payment for 2015 would also be \$1,000  $[(\$15,000 - \$1,000) \div 14]$ . As he again failed to make the payment, it will be added to his 2015 Net Income For Tax Purposes.

**Note 8** Aldo's maximum RRSP deduction for 2015 would be calculated as follows:

Unused Deduction Room At January 1	\$11,000
Addition - Lesser Of:	
2015 RRSP Dollar Limit = \$24,930	
18% Of \$123,000 Earned Income For 2014 = \$22,140	22,140
<hr/>	
Deduction Room At December 31	\$33,140
<hr/>	

Aldo has available contributions of \$35,000  $(\$13,000 + \$22,000)$ . Given this he can deduct the full \$33,140 of available room. This means that there will be no unused deduction room at the end of the year. However, there will be \$1,860  $(\$35,000 - \$33,140)$  of undeducted contributions at that time.

**Note 9** Given his business income, Aldo must pay the maximum CPP contributions for self employed contractors. Since CPP contributions are deducted under ITA 60(e) of subdivision e, they will not affect the calculation of business income, which, in turn, means that they will not affect earned income for RRSP purposes.

As Aldo has no Taxable Income deductions, his Taxable Income is equal to his Net Income For Tax Purposes of \$179,649.

**Cynthia's Net And Taxable Income**

Cynthia's Net Income For Tax Purposes would be calculated as follows:

Net Employment Income	\$50,731
Universal Child Care Benefits	1,440
RRSP Withdrawal	
(\$7,000, Less \$5,000 Attributed To Aldo)	2,000
RRSP Deduction (Note 10)	( 7,000)
Gift From Brother (Not Taxable)	Nil
<u>Net Income For Tax Purposes</u>	<u>\$47,171</u>

**Note 10** Cynthia's maximum RRSP deduction for 2015 is calculated as follows:

Unused Deduction Room At January 1	\$7,000
Addition - Lesser Of:	
2015 RRSP Dollar Limit = \$24,930	
18% Of \$51,000 Earned Income For 2014 = \$9,180	9,180
2014 Pension Adjustment	( 4,800)
2015 Past Service Pension Adjustment (Note 11)	( 2,993)
<u>Available Deduction Room</u>	<u>\$8,387</u>
Maximum Deduction (Limited To Contribution)	( 7,000)
<u>Unused Deduction Room - December 31, 2015</u>	<u>\$1,387</u>

**Note 11** In the three years prior to 2015 that Cynthia was a member of her employer's RPP, her pensionable earnings totaled \$133,000 (\$40,000 + \$45,000 + \$48,000). Given this, the Past Service Pension Adjustment resulting from the increased benefit formula would be calculated as follows:

$$[(1.75\% - 1.5\%)(9)(\$133,000)] = \$2,993$$

As Cynthia has no Taxable Income deductions, her Taxable Income is equal to her Net Income For Tax Purposes of \$47,171.

**Aldo's Base Tax Payable**

Aldo's Base Tax Payable will be calculated as follows:

Tax On First \$138,586		\$29,327
Tax On Next \$41,063 (\$179,649 - \$138,586) At 29 Percent		11,908
<u>Tax Before Credits</u>		<u>\$41,235</u>
Personal Non-Refundable Credits:		
Basic Personal Amount	(\$11,327)	
Spousal (Income Too High)	Nil	
Volunteer Search And Rescue	( 3,000)	
Children's Arts - Lesser Of:		
Actual Costs [(2)(\$1,200)] = \$2,400		
Annual Limit = [(2)(\$500)] \$1,000	( 1,000)	
Public Transit Pass [(2)(8)(\$125)]	( 2,000)	
CPP (Maximum)	( 2,480)	
Medical Expenses - Claimed By Cynthia	Nil	
First Time Home Buyer's (Not Eligible)	Nil	
<u>Credit Base For Personal Credits</u>	<u>(\$19,807)</u>	
Rate	15%	( 2,971)
Dividend Tax Credits		
Eligible Dividends [(6/11)(38%)(8,500)]		( 1,762)
<u>Aldo's Base Tax Payable</u>		<u>\$36,502</u>

**Cynthia's Base Tax Payable**

Cynthia's Base Tax Payable will be calculated as follows:

Tax On First \$44,701		\$6,705
Tax On Next \$2,470 (\$47,171 - \$44,701) At 22 Percent		543
<hr/>		
Tax Before Credits		\$7,248
Personal Non-Refundable Credits:		
Basic Personal Amount	(\$11,327)	
EI Premiums	( 931)	
CPP Contributions	( 2,480)	
Canada Employment	( 1,146)	
Medical Expenses - (Note 12)	( 2,010)	
<hr/>		
Credit Base For Personal Credits	(\$17,894)	
Rate	15%	( 2,684)
<hr/>		
Aldo's Base Tax Payable		\$4,564
<hr/>		

**Note 12** Cynthia claims the medical expenses as she will have a higher medical expense credit base since her income is lower than Aldo's and 3 percent of her Net Income is less than the income threshold. Although Aldo paid the expenses, as stated in Chapter 4:

"Both ITA 118.2 and Income Tax Folio S1-F1-C1, clearly state that medical expenses can only be deducted by the individual who paid for them. However, in the T1 Guide, this rule is contradicted for couples. According to this Guide, either spouse can claim the medical expense credit, without regard to who actually paid for the expenses."

The \$4,300 cost of hair replacement and the \$950 paid for teeth whitening would be considered cosmetic and cannot be included in the base for the medical expense tax credit. Given this, the base for the medical expense tax credit would be calculated as follows:

Eligible Expenses (\$8,675 - \$4,300 - \$950)		\$3,425
Lesser Of:		
[(3%)(\$47,171)] = \$1,415		
2015 Annual Limit = \$2,208		( 1,415)
<hr/>		
Base For Credit		\$2,010
<hr/>		

**Combined Base Tax Payable**

The combined Base Tax Payable for Cynthia and Aldo would be \$41,066 (\$36,502 + \$4,564).

**Part B****The Required Transfer**

In calculating the combined Adjusted Base Tax Payable, the required transfer would be the lesser of \$50,000 and \$66,239 [(\$179,649 - \$47,171) ÷ 2]. Transferring the lesser amount of \$50,000 will leave the following:

Adjusted Taxable Income - Aldo (\$179,649 - \$50,000)	\$129,649
Adjusted Taxable Income - Cynthia (\$47,171 + \$50,000)	\$97,171

**Cynthia's Adjusted Base Tax Payable**

Cynthia's Adjusted Base Tax Payable would be calculated as follows:

Tax On First \$89,401		\$16,539
Tax On Next \$7,770 (\$97,171 - \$89,401) At 26 Percent		2,020
<hr/>		
Tax Payable Before Credit		\$18,559
Personal Non-Refundable Credits:		
Basic Personal Amount	(\$11,327)	
El Premiums	( 931)	
CPP Contributions	( 2,480)	
Medical Expenses - (Note 11)	( 2,010)	
<hr/>		
Credit Base For Personal Credits	(\$17,894)	
Rate	15%	( 2,684)
<hr/>		
Cynthia's Adjusted Base Tax Payable		\$15,875
<hr/>		

**Aldo's Adjusted Base Tax Payable**

Aldo's Adjusted Base Tax Payable would be calculated as follows:

Tax On First \$89,401		\$ 16,539
Tax On Next \$40,248 (\$129,649 - \$89,401) At 26 Percent		10,464
<hr/>		
Tax Before Credits		\$27,003
Personal Non-Refundable Credits:		
Basic Personal Amount	(\$11,327)	
Spousal (Income Too High)	Nil	
Volunteer Search And Rescue	( 3,000)	
Children's Arts - Lesser Of:		
Actual Costs [(2)(\$1,200)] = \$2,400		
Annual Limit = [(2)(\$500)] \$1,000	( 1,000)	
Public Transit Pass [(2)(8)(\$125)]	( 2,000)	
CPP (Maximum)	( 2,480)	
<hr/>		
Credit Base Before Spousal Adjustment	(\$19,807)	
Spousal Adjustment - Not Required	Nil	
<hr/>		
Credit Base	(\$19,807)	
Rate	15%	( 2,971)
<hr/>		
Dividend Tax Credits		
Eligible Dividends [(6/11)(38%)(8,500)]		( 1,762)
<hr/>		
Aldo's Adjusted Base Tax Payable		\$22,270
<hr/>		

Note that the non-refundable credits claimed here are the same as those used in the determination of Aldo's Base Tax Payable. As the spousal credit base was nil in his Base Tax Payable, there is no need for an adjustment in this calculation.

**Combined Adjusted Base Tax Payable**

The combined Adjusted Base Tax Payable would be calculated as follows:

Cynthia's Adjusted Base Tax Payable	\$15,875
Aldo's Adjusted Base Tax Payable	22,270
<hr/>	
Combined Adjusted Base Tax Payable	\$38,145
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**Part C**

The Family Tax Cut for Aldo And Cynthia would be the lesser of \$2,000 and an amount calculated as follows:

Combined Base Tax Payable	\$41,066
Combined Adjusted Base Tax Payable	38,145
Potential Reduction In Tax Payable	\$ 2,921

The lesser figure is \$2,000.

**Part D**

The combined Tax Payable for Cynthia and Aldo, after the application of the Family Tax Cut would be calculated as follows:

Aldo's Tax Payable Before The Family Tax Cut (Same As Base Tax Payable)	\$36,502
Family Tax Cut Claimed By Aldo (Maximum)	( 2,000)
Cynthia's Tax Payable (Same As Base Tax Payable)	4,564
Combined Tax Payable After The Family Tax Cut	\$39,066

Note that, as expected, the combined Tax Payable after the Family Tax Cut is equal to the Combined Base Tax Payable less the \$2,000 Family Tax Cut.

## Solution to Assignment Problem Ten - 9

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**Note To Instructor** This is a very long and complex Case. If you are considering the use of only part of the question, you should be aware that Part B is required to correctly answer Part C.

### Part A(1) - Zhi Liu

#### **Net Income For Tax Purposes**

Mr. Liu's Net Income For Tax Purposes would be calculated as follows:

Net Employment Income (Note 1)	\$178,000
Interest Income (Note 2)	175
Net Rental Income (Note 3)	Nil
Spousal Support Received	6,000
Unpaid Home Buyer's Plan Repayment	1,500
RRSP Loan Interest - Non-Deductible	Nil
Moving Expenses (Note 4)	( 18,198)
Net Taxable Capital Gains (Note 5)	Nil
<b>Net Income for Tax Purposes</b>	<b>\$167,477</b>

**Note 1** Mr. Liu's Net Employment Income would be calculated as follows:

Salary	\$170,000
Moving Cost Allowance	8,000
<b>Net Employment Income</b>	<b>\$178,000</b>

**Note 2** As the Liu's have a joint bank account, the interest of \$350 can be split evenly as \$175 each.

**Note 3** Mr. Liu's Net Rental Income is calculated as follows:

Rent Revenue	\$26,000
Expenses Other Than CCA	( 22,000)
<b>Income Before CCA</b>	<b>\$ 4,000</b>
Maximum CCA - Lesser Of:	
Rental Income Before CCA = \$4,000	
Maximum CCA [(4%)(\$325,000)] = \$13,000	( 4,000)
<b>Net Rental Income</b>	<b>Nil</b>

There is no reduction in CCA for the short fiscal year when the taxpayer is earning property income. Also, the half year rule is not applicable on a non-arm's length transfer of a property that was being used to produce business or property income.

**Note 4** As both Zhi and Meng have income (employment or business) in the new location, either of them can deduct the moving costs, but they cannot both deduct them. Since Zhi is in the top federal bracket and Meng is not, it is more advantageous for him to do so. In the absence of meal receipts, he will use the prescribed \$51 per day (2014 rate as the 2015 rates do not become available until 2016) for each family member. Zhi's deductible moving costs can be calculated as follows:

Airfare For Moving Family	\$2,000
Meals On Move Day [(3)(\$51)]	153
Costs - Waiting For New Home (15 Days Only)	
Hotels [(\$3,000)(15 ÷ 20)]	2,250
Meals [(3)(\$51)(15)]	2,295
Legal Fees And Commissions - Old Home	3,700
Transportation Of Household Goods	4,900
Legal Fees - New Home	2,900
<b>Total Deductible Moving Costs</b>	<b>\$18,198</b>

As this amount is less than his income at his new job, he will be able to deduct the full amount of these expenses.

He cannot deduct the costs related to finding the new home in London (airfare, meals and hotel costs), hotel and meal costs for 5 of the 20 days while the family was waiting for their new home to be ready, repairs to old home to prepare it for sale, the loss on the old home, or decorations for the new home.

**Note 5** The only capital transaction for Mr. Liu during 2015 involved a sale of Matel Industries shares. The tax consequences of this sale can be calculated as follows:

Acquisition Or Sale Date	Shares Purchased (Sold)	Cost Per Share	Total Cost	Average Cost/Share
May 24, 2007	130	\$26.00	\$ 3,380	
June 30, 2008	170	31.00	5,270	
October 31, 2010	300	29.00	8,700	
Subtotal	600		\$17,350	\$28.92
June 9, 2011	(400)	28.92	( 11,568)	
Superficial Loss (Following Calculation)			5,568	
July 5, 2011	400	12.00	4,800	
June 3, 2014	385	18.00	6,930	
Subtotal	985		\$23,080	\$23.43
January 30, 2015	(250)	23.43	( 5,858)	
December 31, 2015 Balances	735		\$17,222	\$23.43

The purchase on July 5, 2011 is within 30 days of the sale of shares on June 9, 2011. As a result, the June 9 loss would be determined to be superficial, and would be disallowed. The superficial loss is calculated as follows, and is added to the ACB of the remaining shares:

Proceeds of sale, June 9, 2011 [(400)(\$15)]	\$ 6,000
Adjusted Cost Base [(400)(\$28.92)]	( 11,568)
Superficial Loss	(\$ 5,568)

Given the average cost calculated above, the allowable capital loss on the January, 2015 sale of shares would be calculated as follows:

Proceeds [(250)(\$20)]	\$5,000
Cost [(250)(\$23.43)]	( 5,858)
Capital Loss	(\$ 858)
Inclusion Rate	1/2
Allowable Capital Loss	(\$ 429)

As Mr. Liu has no taxable capital gains during 2015, \$429 will be carried forward or back as a Net Capital Loss.

### Part A(2) - Zhi Liu

#### Taxable Income

As Mr. Liu has no deductions from his Net Income For Tax Purposes, his Taxable Income will be equal to his Net Income For Tax Purposes of \$167,477.

### Part A(3) - Zhi Liu

#### Tax Payable

Mr. Liu's Tax Payable would be determined as follows:

Tax On First \$138,586		\$29,327
Tax on Next \$28,891 (\$167,477- \$138,586) At 29 Percent		8,378
<hr/>		
Tax Before Credits		\$37,705
Tax Credits:		
Basic Personal	(\$11,327	
CPP	( 2,480)	
EI	( 931)	
Canada Employment	( 1,146)	
<hr/>		
Total Credit Base	(\$15,884)	
Rate	15%	( 2,383)
<hr/>		
Federal Tax Payable		\$35,322
Less: CPP overcontribution (\$2,590 - \$2,480)		( 110)
<hr/>		
Balance owing		\$35,212
<hr/>		

### Part B(1) - Sheng Liu

#### Net Income for Tax Purposes

Sheng Liu's Net Income For Tax Purposes would be calculated as follows:

Net Employment Income		\$10,000
Property income [(4%)((\$100,000)(6/12)]		2,000
Scholarship Received	\$1,000	
Exempt Portion Of Scholarship (100%)	( 1,000)	Nil
RESP – Accumulated earnings		1,000
RESP – CESG payments		2,500
<hr/>		
Net Income for Tax Purposes		\$15,500
<hr/>		

The \$100,000 payment would not be taxable as it is a gift. The interest on the term deposit would not be attributed to his grandfather as Sheng is over age 18. The funds that Sheng received from his RESP that consisted of the funds originally contributed to the plan by Mr. and Ms. Liu are not taxable.

### Part B(2) - Sheng Liu

#### Taxable Income

As Sheng Liu has no deductions from his Net Income For Tax Purposes, his Taxable Income will be equal to his Net Income For Tax Purposes of \$15,500.

**Part B(3) - Sheng Liu****Tax Payable**

Sheng's Tax Payable would be calculated as follows:

Tax On \$15,500 At 15 Percent		\$2,325
Tax Credits:		
Basic Personal	(\$11,327)	
CPP (Given)	( 322)	
Canada Employment	( 1,146)	
Education Related Credits	( 2,705)	
<hr/>		
Total Credit Base	(\$15,500)	
Rate	15%	( 2,325)
<hr/>		
Federal Tax Payable		Nil
<hr/>		

Sheng Liu has available education credits as follows:

Tuition	\$ 3,000
Education [(4)(\$400)]	1,600
Textbook [(4)(\$65)]	260
<hr/>	
Total	\$4,860
<hr/>	

As Sheng has Net Income For Tax Purposes of \$15,500, he must use \$2,705 (\$15,500 - \$11,327 - \$322 - \$1,146) of this total. This means that the maximum transfer to his mother will be \$2,155 (\$4,860 - \$2,705).

**Part C(1) - Meng Liu****Net Income for Tax Purposes**

The required calculations here would be as follows:

Net Business Income (Note 6)	\$115,845
Net Taxable Capital Gain (Note 7)	9,500
Property Income - Interest [(50%)(\$350)]	175
RRSP Deduction (2015 deduction limit)	( 8,000)
Deductible CPP Contributions [(1/2)(\$4,960)] (Note 6)	( 2,480)
<hr/>	
Net Income for Tax Purposes	\$115,040
<hr/>	

**Note 6** Meng Liu's Net Business Income is calculated as follows:

Accounting Income Before Taxes	\$147,000
Accounting Amortization	28,170
Gain On Sale Of Fixed Assets	( 99,290)
Drawings paid to Meng Liu (Not Deductible)	50,000
Landscaping Costs [Deductible Under ITA 20(1)(aa)]	( 12,000)
CCA Classes 3 And 6 (See Calculations)	Nil
Recapture on Building (Class 3)	15,000
Terminal Loss on Fence (Class 6)	( 2,100)
CCA – Class 8 (See Calculations)	( 1,060)
CCA – Class 10 (See Calculations)	( 7,125)
CCA – Class 50 (See Calculations)	( 2,750)
<hr/>	
Net Business Income	\$ 115,845
<hr/>	

Note that the CPP contributions are deducted under ITA 60(e) of subdivision e. This means that they will not affect the calculation of business income, which, in turn, means that they will not affect earned income for RRSP purposes.

**Class 3 Building and Class 6 Fence**

The required calculations for these classes would be as follows:

	Class 3	Class 6
Opening UCC	\$30,000	\$2,100
Disposition – Lesser of:		
Cost (\$45,000 And \$3,000)		
Proceeds (\$125,000 And Nil)	( 45,000)	Nil
CCA Base	(\$15,000)	\$2,100
Recapture on Building	15,000	
Terminal Loss on Fence		(2,100)
January 1, 2016 UCC (Required For Part D)	Nil	Nil

**Class 8 - Office Furniture And Equipment**

The required calculations for this class would be as follows:

Opening Balance		\$2,000
Additions (\$15,000 + \$2,600)	\$17,600	
Chairs And Table Disposition - Lesser Of:		
• Capital Cost = \$8,000		
• Proceeds Of Disposition = \$6,000	( 6,000)	
Office Equipment Disposition:		
• Capital Cost = \$15,000		
• Proceeds Of Disposition = \$5,000	( 5,000)	6,600
One-Half Net Additions [(50%)(\$6,600)]		( 3,300)
CCA Base		\$5,300
2015 CCA [(20%)(\$5,300)]		( 1,060)
One-Half Net Additions		3,300
January 1, 2016 UCC Balance (Required For Part D)		\$7,540

**Class 10 - Vehicles**

The required calculations for this class would be as follows:

Opening Balance		\$11,000
Additions	\$30,000	
Disposition of Delivery Van - Lesser Of:		
• Capital Cost = \$18,000		
• Proceeds Of Disposition = \$4,500	( 4,500)	25,500
One-Half Net Additions [(50%)(\$25,500)]		( 12,750)
CCA Base		\$23,750
2015 CCA [(30%)(\$23,750)]		( 7,125)
One-Half Net Additions		12,750
January 1, 2016 UCC Balance (Required For Part D)		\$29,375

**Class 50 – Computer Hardware and Systems Software**

The required calculations for this class would be as follows:

Opening Balance	Nil
Additions	\$10,000
One-Half Net Additions [(50%)(\$10,000)]	( 5,000)
CCA Base	\$ 5,000
2015 CCA [(55%)(5,000)]	( 2,750)
One-Half Net Additions	5,000
January 1, 2016 UCC Balance (Required For Part D)	\$ 7,250

**Note 7** Meng Liu – Taxable Capital Gains

	<b>Land</b>	<b>Building</b>
Proceeds Of Disposition: Sale Price	\$20,000	\$125,000
Adjusted Cost Base	( 5,000)	( 45,000)
Capital Gain	\$15,000	\$ 80,000

The total capital gain on the sale of the property is \$95,000. Based on this, the maximum reserve for 2015 would be the lesser of:

- [(\$95,000)(90%)] = \$85,500
- [(\$95,000)(20%)(4 - 0)] = \$76,000

The lesser figure is \$76,000, reflecting the fact that the down payment was less than 20 percent. Given this, the taxable capital gain for 2015 would be calculated as follows:

Total Capital Gain	\$95,000
Reserve	( 76,000)
Capital Gain	\$19,000
Inclusion Rate	1/2
Taxable Capital Gain For 2015	\$ 9,500

**Part C(2) - Meng Liu****Taxable Income**

As Meng Liu has no deductions from her Net Income For Tax Purposes, her Taxable Income will be equal to her Net Income For Tax Purposes of \$115,040.

**Part C(3) - Meng Liu****Tax Payable**

Meng Liu's Tax Payable would be determined as follows:

Tax On First \$89,401		\$16,539
Tax on Next \$25,639 (\$115,040 – \$89,401) at 26%		6,666
<hr/>		
Tax Before Credits		\$23,205
Tax Credits:		
Basic Personal	(\$11,327)	
CPP	( 2,480)	
Transfer of Sheng's education credits	( 2,155)	
<hr/>		
Total Credit Base	(\$15,962)	
Rate	15%	( 2,394)
<hr/>		
Federal Tax Payable		\$20,811
RRSP overcontribution penalty (Note 8)		40
CPP on self employment income		4,960
<hr/>		
Balance owing		\$25,811
<hr/>		

**Note 8** Meng's contribution of \$12,000 was \$4,000 greater than her deduction limit for 2015. While a taxpayer is allowed a cumulative overcontribution of \$2,000, the extra \$2,000 (\$4,000 - \$2,000) will attract a penalty under ITA 204.1(2.1) of 1 percent of the excess for each month that it is present. The penalty here is \$40 [(1%)(2 Months)(\$2,000)].

**Part D****Carry Forwards**

The only carry forward was Zhi Liu's \$429 allowable capital loss carry over. The calculations for this are in Part A(1).

**UCC Balances**

The UCC balances related to Meng's business were calculated in Part C(1). They are as follows:

Class 3	Nil
Class 6	Nil
Class 8	\$ 7,540
Class 10	29,375
Class 50	7,250

**Part E - Maximum Deductible RRSP Contributions****Zhi Liu**

Net Employment Income	\$178,000
Net Rental Income	Nil
Taxable support payments received	6,000
<hr/>	
2015 Earned Income	\$184,000
<hr/>	

Given this, his maximum 2016 deductible contribution would be calculated as follows:

2015 RRSP Deduction Limit (Given)	\$ 4,000
Deduction For 2015	Nil
<hr/>	
January 1, 2016 Unused Deduction Room	\$ 4,000
Annual Addition - Lesser Of:	
• 2016 RRSP Dollar Limit = \$25,370	
• 18% of 2015 Earned Income Of \$184,000 = \$33,120	25,370
<hr/>	
2016 RRSP Deduction Limit	\$29,370
<hr/>	

As he has no undeducted contributions from previous years, Zhi Liu's maximum deductible contribution for 2016 is equal to the deduction limit of \$29,370.

Note that if he makes the required Home Buyers' Plan repayment of \$1,500, it will not result in a higher deduction.

### **Meng Liu**

Meng Liu's only Earned Income for RRSP purposes is her \$115,845 of Net Business Income. Given this, her maximum 2016 deductible contribution would be calculated as follows:

2015 RRSP Deduction Limit (Given)	\$ 8,000
Maximum Deduction For 2015 (Contribution = \$12,000)	( 8,000)
<hr/>	
January 1, 2016 Unused Deduction Room	Nil
Annual Addition - Lesser Of:	
• 2016 RRSP Dollar Limit = \$25,370	
• 18% of 2015 Earned Income Of \$115,845 = \$20,852	20,852
<hr/>	
2016 RRSP Deduction Limit	\$20,852
<hr/>	

As Meng Liu has undeducted contributions from 2015 of \$4,000 (\$12,000 - \$8,000), she only needs to contribute \$16,852 (\$20,852 - \$4,000) to be able to deduct her full limit of \$20,852.

### **Liu Family RRSP Recommendations**

Given their income levels, Mr. and Ms. Liu should try to budget to make their maximum RRSP contributions each year and possibly co-ordinate their contributions better. Ms. Liu overcontributed resulting in a penalty while Mr. Liu forgot to make the repayments on his Home Buyers' Plan, which cost him an additional \$435 [(29%)(1,500)] in federal income tax. If the family has sufficient funds, it could be advantageous to repay all of the Home Buyers' Plan to prevent further penalties.

Other than the \$500 in interest paid on the RRSP loan, there is no information on whether the RRSP loan was paid off. Since the interest is not deductible, efforts should be made to pay this loan off. If additional funds are required, the family unit should be able to find an alternative source of financing where the interest is deductible.

Although the information is not provided to calculate an RRSP deduction amount for Sheng, he should have a deduction limit given his past work for his mother's business. RRSP contributions can be made on the basis of this and deducted in any future year. This could be advantageous in that he is likely to be in a higher tax bracket after graduation.

Alternatively, if Sheng does deduct his RRSP contributions while he is still a student, there would be a higher transfer of his education related tax credits available to his parents. For example, if he had an RRSP deduction of \$2,705 this year, he could have transferred his entire education related credit amount to his mother.

The Liu's should also try to top up their Tax Free Savings Account balances annually. The interest that was earned on their joint bank account could be earned tax free in a TFSA. In 2015, the Liu's paid federal tax of \$96 [(\$175 x 29%) + (\$175 x 26%)] on their interest income of \$350. Unless the funds were only temporarily in the savings account before being used, it would have been more advantageous to have these funds earn a tax free return in a TFSA. It is also a much better decision to put excess funds in a TFSA rather than to overcontribute to an RRSP as Ms. Liu did in 2015, since the RRSP overcontribution resulted in a penalty.

As long as Sheng has sufficient funds, he should contribute the maximum to both his RRSP and TFSA to reduce his fully taxable interest income. He could also take advantage of the non-penalty \$2,000 over contribution to his RRSP.