

ADM 3346 X
COST ACCOUNTING 1
Spring/Summer 2013
Quiz No. 6
Solutions

..... / 20 marks

NAME: _____

STUDENT #: _____

Statement of Academic Integrity:

The School of Management does not condone academic fraud, an act by a student that may result in a false academic evaluation of that student or of another student. Without limiting the generality of this definition, academic fraud occurs when a student commits any of the following offences: plagiarism or cheating of any kind, use of books, notes, mathematical tables, dictionaries or other study aid unless an explicit written note to the contrary appears on the exam, to have in his/her possession cameras, radios (radios with head sets), tape recorders, pagers, cell phones, or any other communication device which has not been previously authorized in writing.

Statement to be signed by the student:

I have read the text on academic integrity and I pledge not to have committed or attempted to commit academic fraud in this examination.

Name: _____ (signature)

Note:

A quiz received without the signature of the student will not be graded and will receive a score of zero.

Question No. 1 (4 marks)

Tubbard Company uses a standard cost system. The following information pertains to direct labour hours for product B for the month of October:

Standard hours for the output produced	2,000
Direct labour rate per hour	\$22.50
Standard labour rate per hour	\$20.00
Direct labour efficiency variance	\$4,000 <u>U</u>

Required:

Calculate the direct labour rate variance.

Answer:

$$\text{Direct labor efficiency variance} = (AH - SH) \times SR$$

$$\$4,000 = (AH - 2,000) \times \$20.00$$

$$\text{Therefore: } AH = 2,000 + \$4,000 / \$20.00$$

$$AH = 2,200 \text{ hours}$$

$$\begin{aligned} \text{Direct labor rate variance} &= (AR - SR) \times AH \\ &= (\$22.50 - \$20.00) \times 2,200 \\ &= \underline{\underline{\$5,500 \text{ U}}} \end{aligned}$$

Question No. 2 (16 marks)

Patio Solutions manufactures picnic table kits that are sold in various large discount department stores. The standard cost card indicates the following costs are incurred to produce a single picnic table kit:

60 board feet of pine lumber @\$0.90 per board foot	\$54
2 pipe frame units @\$9 per unit	18
1 package of fasteners	8
0.5 hours of direct labor at \$14 per hour	7
Variable factory overhead 0.2 machine hours at \$20 per machine hour	4
Fixed factory overhead at \$15 per machine hour*	3
Total	<u>\$94</u>

* Based on budgeted Fixed Factory Overhead of \$30,000 and expected annual capacity of 2,000 hours.

During 2012, the firm had the following actual data related to the production of 11,000 picnic kits:

Purchase and Usage of Material

Lumber	690,000 board feet at \$.85 per board foot
Frame units	22,250 units at \$9.10 per unit
Packages of fasteners	11,120 packages at \$6.90 per package

Direct Labour Used

5,600 hours at \$14.20 per hour

Factory Overhead Costs

Actual machine hours recorded	2,000
Actual variable factory overhead incurred	\$38,000
Actual fixed factory overhead incurred	\$32,300

Question No. 2 (continued) (16 marks)

Calculate all material, labor, and overhead input variances. Indicate whether each variance is favourable or unfavourable.

Answer:

	<u>AQ*AP</u>	<u>AQ*SP</u>	<u>SQA*SP</u>
<u>Lumber</u>	$690,000 * .85 = 586,500$	$690,000 * .90 = 621,000$	$11,000 * 60 * .90 = 594,000$
	<u>34,500 F</u>		<u>27,000 U</u>
<u>Pipe Frame</u>	$22,250 * \$9.10 = 202,475$	$22,250 * 9 = 200,250$	$11,000 * 2 * 9 = 198,000$
	<u>2,225 U</u>		<u>2,250 U</u>
<u>Fasteners</u>	$11,120 * 6.90 = 76,728$	$11,120 * 8 = 88,960$	$11,000 * 8 = 88,000$
	<u>12,232 F</u>		<u>960 U</u>
<u>Labour</u>	$5600 * 14.20 = 79,520$	$5600 * 14 = 78,400$	$11,000 * .5 * 14 = 77,000$
	<u>1,120 U</u>		<u>1,400 U</u>
<u>VOH</u>	$38,000$	$2000 * 20 = 40,000$	$11,000 * .2 * 20 = 44,000$
	<u>2,000 F</u>		<u>4,000 F</u>
	<i>Actual</i>	<i>Budget</i>	<i>Applied</i>
<u>FOH</u>	$32,300$	$30,000$	$11,000 * .2 * 15 = 33,000$
	<u>2,300 U</u>		<u>3,300 F</u>