

## Chapter 12 Wage Determination

### CHAPTER 12

# Wage Determination

Topic	Question numbers
12.1	Productivity and the general level of wages
	Productivity and the general level of wages
	The role of productivity
	Real wages and productivity
	Long-run trend of real wages
12.2	Wages in a perfectly competitive labour market
	Market demand for labour
	Market supply of labour
	Labour market equilibrium
12.3	Monopsony model
	Upward-sloping labour supply to a firm
	MFC higher than the wage rate
	Equilibrium wage and employment
	Examples of monopsony power
12.4	Unions and the labour market: Three models
	Demand-enhancement model
	Exclusive or craft union model
	Inclusive or industrial union model
	Wage increases and unemployment
	Bilateral monopoly model
12.5	The minimum wage controversy
	Case against the minimum wage
	Case for the minimum wage
	Evidence and conclusions
12.6	Wage differentials
	Marginal revenue productivity
	Noncompeting groups
	Compensating differences
	Market imperfections
12.7	Pay for performance and the principal-agent problem
	The principal-agent problem revisited
	Addendum: The negative side effects of pay for performance
	The last word
	True-False

## Chapter 12 Wage Determination

1. The wage rate is:

- A) the total revenue minus the total cost of the firm.
- B) the marginal revenue minus the marginal cost of the firm.
- C) the price paid per unit of capital goods.
- D) the price paid per unit of labour services.

Ans: D Level: Easy Main Topic: 12.1 Productivity and the general level of wages  
Page: 286 Subtopic: Productivity and the general level of wages Type: Definition

2. Real wages would rise if the:

- A) prices of goods and services rose more rapidly than nominal-wage rates.
- B) prices of goods and services rose less rapidly than nominal-wage rates.
- C) prices of goods and services and wage rates both rose.
- D) prices of goods and services and wage rates both fell.

Ans: B Level: Moderate Main Topic: 12.1 Productivity and the general level of wages  
Page: 286-287 Subtopic: Productivity and the general level of wages  
Type: Application

3. The real wage will rise if the nominal wage:

- A) falls more rapidly than the general price level.
- B) increases at the same rate as labour productivity.
- C) rises more rapidly than the general price level.
- D) rise less rapidly than the general price level.

Ans: C Level: Easy Main Topic: 12.1 Productivity and the general level of wages  
Page: 286-287 Subtopic: Productivity and the general level of wages  
Type: Application

4. Which statement is correct?

- A) The percentage change in the nominal wage plus the percentage change in the price level equals the percentage change in the real wage.
- B) The percentage change in the real wage minus the percentage change in the price level equals the percentage change in the nominal wage.
- C) The percentage change in the price level minus the percentage change in the nominal wage equals the percentage change in the real wage.
- D) The percentage change in the nominal wage minus the percentage change in the price level equals the percentage change in real wage.

Ans: D Level: Moderate Main Topic: 12.1 Productivity and the general level of wages  
Page: 286-287 Subtopic: Productivity and the general level of wages  
Type: Application

## Chapter 12 Wage Determination

5. If the nominal wage increases by less than the price level, the real wage:

- A) will increase.
- B) will decrease.
- C) may either increase or decrease.
- D) will diverge from labour productivity growth.

Ans: B Level: Easy Main Topic: 12.1 Productivity and the general level of wages  
Page: 286-287 Subtopic: Productivity and the general level of wages  
Type: Application

6. Real wages in Canada are:

- A) the highest in the world.
- B) relatively high, but not as high as in some other industrially advanced nations.
- C) much higher than output per worker.
- D) higher than nominal wages.

Ans: B Level: Easy Main Topic: 12.1 Productivity and the general level of wages  
Page: 287 Subtopic: The role of productivity Type: Application

7. The "globalization of production" may have:

- A) pulled down the real wages of unskilled workers - and therefore the average real wages of all workers - in Canada.
- B) increased the demand for Canadian unskilled workers and increased their real wages.
- C) reduced employer interest in pay-for-performance schemes.
- D) caused real wages in Canada to rise by unusually rapid rates in the past two decades.

Ans: A Level: Easy Main Topic: 12.1 Productivity and the general level of wages  
Page: 287-288 Subtopic: The role of productivity Type: Application

8. According to international comparisons, which nation had the highest real wages in 2006?

- A) the United States
- B) Germany
- C) Italy
- D) Canada

Ans: B Level: Easy Main Topic: 12.1 Productivity and the general level of wages  
Page: 287-288 Subtopic: The role of productivity Type: Application

## Chapter 12 Wage Determination

9. Increases in the productivity of labour result partly from:

- A) the law of diminishing returns.
- B) improvements in technology.
- C) reductions in wage rates.
- D) increases in the quantity of labour.

Ans: B Level: Easy Main Topic: 12.1 Productivity and the general level of wages  
Page: 288 Subtopic: The role of productivity Type: Application

10. The productivity and real wages of workers in the industrially advanced economies have risen historically partly because:

- A) workers have acquired less education and training over time.
- B) workers have been employed with larger quantities of capital equipment.
- C) over time the capital equipment used by workers has deteriorated in quality.
- D) the supply of labour has increased.

Ans: B Level: Moderate Main Topic: 12.1 Productivity and the general level of wages  
Page: 288 Subtopic: The role of productivity Type: Application

11. Economists have attempted to explain the trend of real wages in the past fifteen years in terms of all of the following except:

- A) diminished rates of capital accumulation.
- B) the declining quality of education.
- C) unusually large numbers of labour force entrants.
- D) understatement of the rate of inflation.

Ans: D Level: Easy Main Topic: 12.1 Productivity and the general level of wages  
Page: 288 Subtopic: The role of productivity Type: Application

12. The basic explanation for high real wages in the industrially advanced economies is that the:

- A) labour supply has increased more rapidly than labour demand.
- B) labour demand has increased more rapidly than labour supply.
- C) unemployment in these nations has remained relatively consistent.
- D) inflation rate in these nations has increased faster than the rate of increase in nominal wages.

Ans: B Level: Moderate Main Topic: 12.1 Productivity and the general level of wages  
Page: 289 Subtopic: Real wages and productivity Type: Application

## Chapter 12 Wage Determination

13. Real wages in Canada in the long run:

- A) show no discernible relationship to output per worker.
- B) have increased at about the same rate as increases in output per worker.
- C) have increased slower than increases in output per worker.
- D) have increased faster than increases in output per worker.

Ans: B Level: Easy Main Topic: 12.1 Productivity and the general level of wages  
Page: 289 Subtopic: Real wages and productivity Type: Application

14. Over the long run, real earnings per worker can increase only at about the same rate as the economy's rate of growth of:

- A) total output.
- B) stock of capital.
- C) output per worker.
- D) international trade.

Ans: C Level: Easy Main Topic: 12.1 Productivity and the general level of wages  
Page: 289 Subtopic: Real wages and productivity Type: Application

15. The long-run trend of real wages:

- A) cannot be determined from available data on nominal wages and the price level.
- B) has been downward because the price level has risen faster than nominal wages.
- C) has been upward.
- D) has been downward because labour's share of the domestic income has fallen.

Ans: C Level: Easy Main Topic: 12.1 Productivity and the general level of wages  
Page: 289 Subtopic: Long-run trend of real wages Type: Application

16. Which is a valid explanation for real wage growth?

- A) the rising cost of capital accumulation
- B) a contraction of employment in service industries
- C) an increase in the quantity of labour
- D) an increase in the rate of productivity growth

Ans: D Level: Moderate Main Topic: 12.1 Productivity and the general level of wages  
Page: 289 Subtopic: Long-run trend of real wages Type: Application

## Chapter 12 Wage Determination

17. To find the market demand curve for labour, one should:

- A) sum horizontally the marginal revenue product curves of individual firms.
- B) sum vertically the marginal revenue product curves of individual firms.
- C) sum up the supply of labour to individual firms.
- D) sum horizontally the marginal factor cost to the individual firms.

Ans: A Level: Easy Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290 Subtopic: Market demand for labour Type: Definition

18. Marginal Revenue Product (MRP) curve is :

- A) the market demand curve for labour and, it refers to the increase in total revenue resulting from sale of an additional unit of output.
- B) the market demand curve for labour and, is the vertical summation of the marginal revenue product curves of individual firms.
- C) the market demand curve for labour and, is the sum of supply of labour to individual firms.
- D) the market demand curve for labour and, is the horizontal summation of the marginal factor cost to the individual firms.

Ans: A Level: Easy Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290 Subtopic: Market demand for labour Type: Definition

19. The reason that the supply curve for labour in a perfectly competitive market rises is because:

- A) the wage rate paid to workers falls as more are hired.
- B) the marginal product of labour falls as output increases.
- C) marginal factor cost rises as productivity increases.
- D) higher wages must be paid to bid workers away from other opportunities.

Ans: D Level: Easy Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290 Subtopic: Market supply of labour Type: Application

20. If the supply of labour in a perfectly competitive labour market decreases, the labour:

- A) supply curve for a single employer will shift downward.
- B) supply curve for a single employer will shift upward.
- C) demand curve for a single employer will shift upward.
- D) demand curve for a single employer will shift downward.

Ans: B Level: Moderate Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290 Subtopic: Market supply of labour Type: Application

## Chapter 12 Wage Determination

21. The labour supply curve for a particular occupation is upward sloping because:

- A) higher wages will be needed to attract workers from other occupations.
- B) lower wages will be needed to increase employment.
- C) higher wages will enable some workers to afford more leisure.
- D) the labour demand curve is downward sloping.

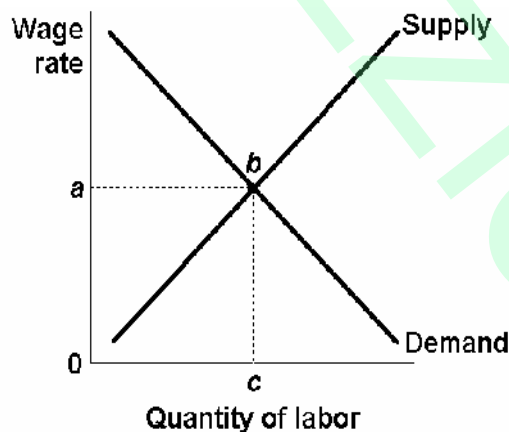
Ans: A Level: Easy Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290 Subtopic: Market supply of labour Type: Application

22. The market supply curve for labour is upward sloping because:

- A) of diminishing returns.
- B) of the opportunity cost of labour in housekeeping, leisure, or alternative employments.
- C) of declining MFC.
- D) each employer is a "wage taker."

Ans: B Level: Easy Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290 Subtopic: Market supply of labour Type: Application

23. The graph below represents the supply and demand for labour in a perfectly competitive market. The area oabc represents:

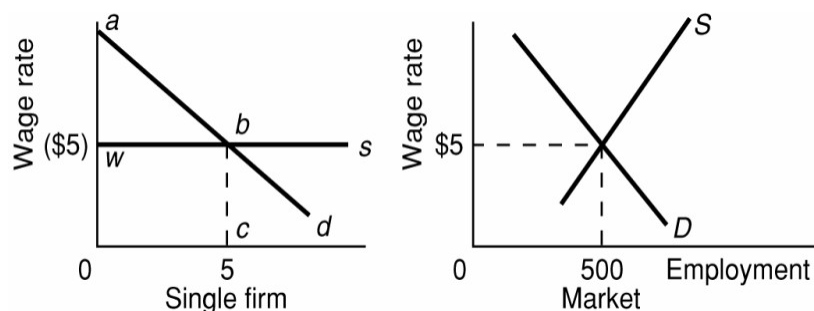


- A) total revenue of the firm.
- B) total earnings of labour.
- C) marginal revenue product.
- D) marginal labour cost.

Ans: B Level: Easy Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium Type: Graphic

## Chapter 12 Wage Determination

Use the following to answer questions 24-25:



24. Refer to the diagrams above. The firm:

- A) is a monopsonist in the hire of labour.
- B) must be selling its product in an imperfectly competitive market.
- C) is a "wage taker."
- D) must pay a higher marginal factor cost for each successive worker.

Ans: C Level: Easy Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium Type: Graphic

25. Refer to the diagrams above. The firm's total wage cost:

- A) is oabc.
- B) is owbc.
- C) is wab.
- D) cannot be determined.

Ans: B Level: Moderate Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium Type: Graphic

26. Refer to the diagrams above. The firm's total revenue:

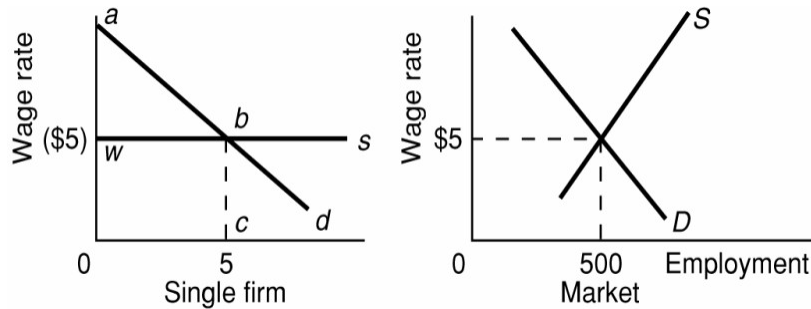
- A) is oabc.
- B) is owbc.
- C) is wab.
- D) cannot be determined.

Ans: A Level: Difficult Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium Type: Graphic



## Chapter 12 Wage Determination

27. Refer to the diagrams. The amount available to pay to non-labour resources:



- A) is oabc.
- B) is owbc.
- C) is wab.
- D) cannot be determined.

Ans: C Level: Difficult Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium Type: Graphic

Use the following to answer questions 28-29:

A firm's labour input, total output of labour, and product price schedules are given below. Labour is the only variable input.

Units of labor	Total output per day	Price of good
2	10	\$10
3	14	9
4	19	8
5	23	7
6	27	6
7	31	5

28. Refer to the table and information provided above. What is the marginal revenue product of the fifth worker?

- A) \$6
- B) \$7
- C) \$8
- D) \$9

Ans: D Level: Moderate Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium Type: Calculation

## Chapter 12 Wage Determination

29. Refer to the table and information provided above. How many workers will the firm hire if the wage rate is \$8 per day?

A) 3  
B) 4  
C) 5  
D) 6

Ans: C Level: Moderate Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium  
Type: Calculation

30. Suppose the MRP of a firm's twelfth worker is \$22 and the worker's marginal wage cost is \$16. We can say with certainty that the firm:

A) is hiring labour in a competitive labour market at a wage rate of \$16.  
B) is hiring labour in a monopsonistic labour market.  
C) will find it profitable to hire fewer workers.  
D) will find it profitable to hire more workers.

Ans: D Level: Moderate Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium  
Type: Application

31. Marginal factor cost refers to the:

A) increase in total revenue resulting from the sale of the extra output of one more worker.  
B) price at which additional units of a factor can be hired in an imperfectly competitive factor market.  
C) increase in total cost resulting from the production of one more unit of output.  
D) amount by which a firm's total factor cost increases as the result of hiring one more unit of the resource.

Ans: D Level: Easy Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium Type: Definition

## Chapter 12 Wage Determination

32. If a firm is hiring a certain type of labour under perfectly competitive conditions:
- A) its labour demand curve will be perfectly elastic at the market-determined wage rate.
  - B) the labour supply curve will lie above the marginal labour cost curve.
  - C) the labour supply and marginal labour (resource) cost curves will coincide and be upward sloping.
  - D) the labour supply and marginal labour (resource) cost curves will coincide and be perfectly elastic.

Ans: D Level: Difficult Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium Type: Application

33. If the supply of labour in a perfectly competitive labour market increases, the labour:
- A) supply curve for a single employer will shift downward.
  - B) supply curve for a single employer will shift upward.
  - C) demand curve for a single employer will shift upward.
  - D) demand curve for a single employer will shift downward.

Ans: A Level: Moderate Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium Type: Application

34. A firm in a perfectly competitive product market finds it must increase wages to attract extra workers. The firm will hire labour up to the point where the marginal:
- A) product of labour equals the wage rate.
  - B) revenue product of labour equals the wage rate.
  - C) revenue product of labour starts to decline.
  - D) revenue product equals the cost of hiring an extra worker.

Ans: D Level: Moderate Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium Type: Application

35. If the wage rate in a perfectly competitive labour market increases, it will cause the:
- A) marginal factor cost curve for a single competitive firm in the industry to decrease.
  - B) marginal factor cost curve for a single competitive firm in the industry to increase.
  - C) supply curve for a single competitive firm to increase.
  - D) supply curve for the industry to increase

Ans: B Level: Moderate Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium Type: Application

## Chapter 12 Wage Determination

36. If the wage rate in a perfectly competitive labour market decreases, it will cause the:
- A) supply curve for the industry to decrease.
  - B) supply curve for a single competitive firm to decrease.
  - C) marginal factor cost curve for a single competitive firm in the industry to decrease.
  - D) marginal factor cost curve for a single competitive firm in the industry to increase.

Ans: C Level: Moderate Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium  
Type: Application

37. A firm operating in a perfectly competitive factor market has a factor supply curve that is:
- A) perfectly inelastic.
  - B) perfectly elastic.
  - C) highly inelastic.
  - D) highly elastic.

Ans: B Level: Moderate Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium  
Type: Application

Use the following to answer questions 38-41:

Use the labour demand data on the left and the labour supply data on the right in answering the following question(s):

<u>Employment</u>	<u>Marginal product</u>	<u>Product price</u>	<u>Employment</u>	<u>Wage rate</u>
0	0	\$3	0	\$11
1	14	3	1	11
2	12	3	2	11
3	9	3	3	11
4	7	3	4	11
5	4	3	5	11
6	2	3	6	11

## Chapter 12 Wage Determination

38. On the basis of the information provided above, we:
- A) can say that the firm's labour supply curve is upward sloping.
  - B) cannot say whether the firm's product market is purely or imperfectly competitive.
  - C) can say that the firm is selling its product in a perfectly competitive market.
  - D) can say that the firm is selling its product in an imperfectly competitive market.

Ans: C Level: Easy Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium Type: Application

39. Refer to the data above. The firm's labour supply curve is:
- A) such that it does not intersect the labour demand curve.
  - B) upward sloping.
  - C) perfectly inelastic.
  - D) perfectly elastic.

Ans: D Level: Easy Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium Type: Application

40. Refer to the data above. The firm is hiring labour:
- A) at a wage rate which exceeds labour's MRP.
  - B) under perfectly competitive conditions.
  - C) in an imperfectly competitive market.
  - D) as a monopsonist.

Ans: B Level: Easy Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium Type: Application

41. Refer to the data above. The firm will maximize profits (or minimize losses) by:
- A) hiring 5 workers.
  - B) hiring 4 workers.
  - C) hiring 3 workers.
  - D) hiring 2 workers.

Ans: A Level: Difficult Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium Type: Calculation

## Chapter 12 Wage Determination

42. A firm operating in a perfectly competitive labour market has the following marginal revenue product schedule.

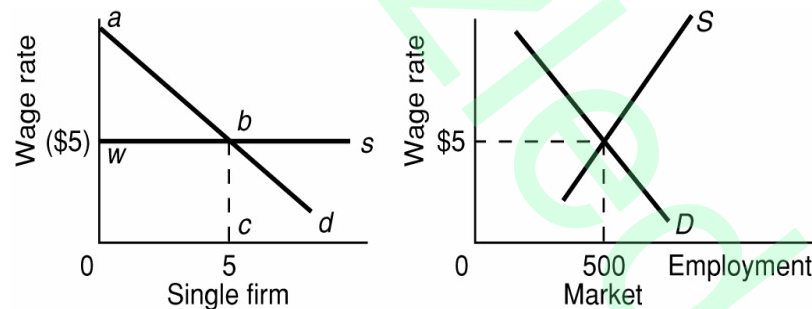
<u>Workers</u>	<u>MRP</u>
1	\$24
2	22
3	20
4	18
5	16
6	14
7	12

If the wage rate decreases from \$17 to \$11, by how much will the firm expand employment?

- A) 5 workers
- B) 4 workers
- C) 3 workers
- D) 2 workers

Ans: C Level: Difficult Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium Type: Calculation

43. Refer to the diagrams. The firm:



- A) has a principal-agent problem.
- B) has a constant marginal factor cost of \$5.
- C) has a marginal factor cost which exceeds the wage rate for each worker.
- D) will fail to maximize profits if it hires 5 workers.

Ans: B Level: Easy Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium Type: Graphic

## Chapter 12 Wage Determination

44. A firm has a single wage rate. At present 10 workers are employed at \$50 per day. Wages are raised to \$55 per day to attract an extra worker. The marginal labour cost per day is:
- A) \$5.
  - B) \$10.
  - C) \$55.
  - D) \$105.

Ans: D Level: Difficult Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium Type: Calculation

45. The individual firm in a perfectly competitive labour market faces:
- A) a perfectly elastic labour supply curve and a downward sloping labour demand curve.
  - B) a perfectly elastic labour demand curve and an upward sloping labour supply curve.
  - C) labour demand and labour supply curves both of which are perfectly elastic.
  - D) a downward sloping labour demand curve and an upward sloping labour supply curve.

Ans: A Level: Moderate Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290-291 Subtopic: Labour market equilibrium Type: Application

46. If a firm faces an upward sloping labour supply curve (and there is no union or minimum wage), its:
- A) MFC curve is also upward sloping.
  - B) MFC curve is perfectly elastic.
  - C) MFP curve is perfectly inelastic.
  - D) MRP curve is also upward sloping.

Ans: A Level: Moderate Main Topic: 12.3 Monopsony model Page: 293 Subtopic: Upward-sloping supply to a firm Type: Application

47. The average cost curve of labour facing the monopsonist:
- A) is the supply curve of labour.
  - B) lies below its supply curve.
  - C) lies above its supply curve.
  - D) is the marginal cost curve of labour.

Ans: A Level: Moderate Main Topic: 12.3 Monopsony model Page: 293 Subtopic: Upward-sloping supply to a firm Type: Application

## Chapter 12 Wage Determination

48. The critical feature of a monopsonistic labour market is that the employer:

- A) has a perfectly elastic demand curve for labour.
- B) can hire any number of workers it chooses at the "going" wage rate.
- C) faces an upward sloping labour supply curve.
- D) faces a perfectly inelastic labour supply curve.

Ans: C Level: Moderate Main Topic: 12.3 Monopsony model Page: 293

Subtopic: Upward-sloping supply to a firm Type: Application

49. When the supply curve of labour is upward sloping, the marginal cost curve of labour facing the monopsonist:

- A) lies above the supply curve of labour.
- B) is the supply curve of labour that it faces.
- C) lies below and parallel to the supply curve of labour.
- D) lies above and parallel to the supply curve of labour.

Ans: A Level: Moderate Main Topic: 12.3 Monopsony model Page: 293

Subtopic: MFC higher than the wage rate Type: Application

50. Refer to the information below. This labour supply curve demonstrates that:

Answer the next question(s) on the basis of the following supply information for a single firm in a particular labour market:

<u>Employment</u>	<u>Wage Rate</u>	<u>Quantity supplied</u>
1	\$ 5	1
2	10	2
3	15	3
4	20	4
5	25	5

- A) the firm is selling its output under imperfectly competitive conditions.
- B) the firm is selling its output under perfectly competitive conditions.
- C) higher wage rates must be paid to successive workers to overcome their higher opportunity costs.
- D) the firm is hiring labour under perfectly competitive conditions.

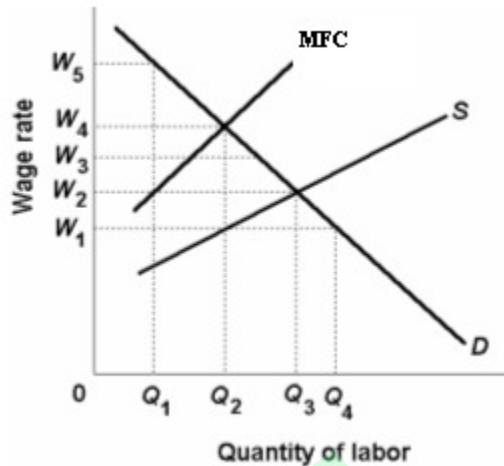
Ans: C Level: Moderate Main Topic: 12.3 Monopsony model Page: 293

Subtopic: MFC higher than the wage rate Type: Application



## Chapter 12 Wage Determination

Use the following to answer questions 51-52:



51. If the diagram above was relevant to an individual firm, we could conclude that the firm is:

- A) a pure competitor in the hire of labour.
- B) a monopsonist in the hire of labour.
- C) selling its product in an imperfectly competitive market.
- D) selling its product in a perfectly competitive market.

Ans: B Level: Moderate Main Topic: 12.3 Monopsony model Page: 293  
Subtopic: MFC higher than the wage rate Type: Graphic

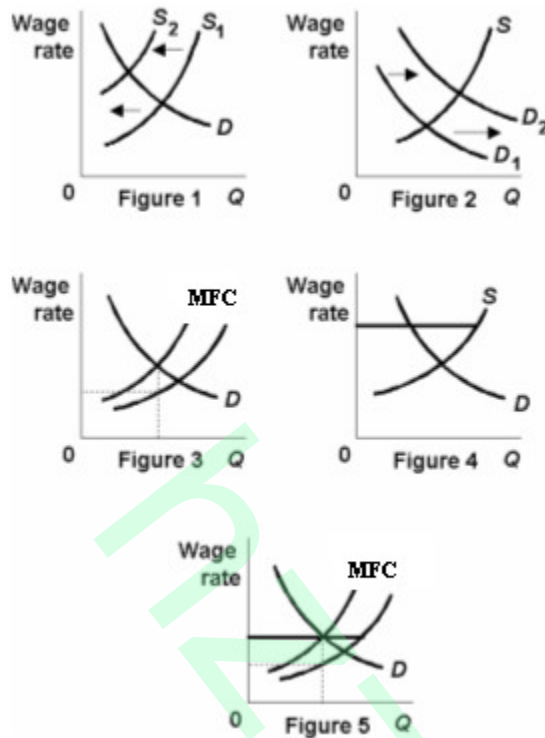
52. Refer to the diagram above. The MFC curve lies above the labour supply curve because:

- A) any number of workers can be hired at the "going" equilibrium wage rate.
- B) the firm must lower product price to increase its sales.
- C) the higher wage which is needed to attract additional workers must also be paid to all workers already employed.
- D) the relationship between wage rates and the profit-maximizing amount of labour to employ is inverse.

Ans: C Level: Moderate Main Topic: 12.3 Monopsony model Page: 293  
Subtopic: MFC higher than the wage rate Type: Graphic

## Chapter 12 Wage Determination

53. Refer to the below labour market diagrams. A monopsonistic labour market is represented by Figure:



- A) 5.
- B) 4.
- C) 3.
- D) 2.

Ans: C Level: Moderate Main Topic: 12.3 Monopsony model Page: 293  
Subtopic: MFC higher than the wage rate Type: Graphic

54. If an employer is a monopsonist:

- A) its MFC curve will lie below its labour demand curve.
- B) its labour supply and MFC curves will coincide and be perfectly elastic.
- C) it must also be a monopolist in the product market.
- D) its labour supply curve will be upward sloping and the MFC curve will lie above it.

Ans: D Level: moderate Main Topic: 12.3 Monopsony model Page: 293  
Subtopic: MFC higher than the wage rate Type: Application

## Chapter 12 Wage Determination

Use the following to answer question 55:

Answer the next question(s) on the basis of the following supply information for a single firm in a particular labour market:

<u>Employment</u>	<u>Wage rate</u>	<u>Quantity supplied</u>
1	\$ 5	1
2	10	2
3	15	3
4	20	4
5	25	5

55. Refer to the information above. The marginal factor (labour) cost of the third worker:

- A) is \$15.
- B) is \$25.
- C) is \$35.
- D) is \$45.

Ans: B Level: Moderate Main Topic: 12.3 Monopsony model Page: 293  
Subtopic: MFC higher than the wage rate Type: Calculation

56. The following is a monopsonist's employment schedule. What is the firm's marginal factor cost when it hires the eleventh worker?

<u>L</u>	<u>W (\$)</u>
-	-
9	28
10	30
11	35
12	40

- A) \$58
- B) \$65
- C) \$75
- D) \$85

Ans: D Level: Moderate Main Topic: 12.3 Monopsony model Page: 293  
Subtopic: MFC higher than the wage rate Type: Calculation

## Chapter 12 Wage Determination

57. A monopsonistic employer's marginal factor (labour) cost curve:
- A) is always more elastic than the labour supply curve.
  - B) coincides with the labour supply curve.
  - C) lies below the labour supply curve because the higher wage paid to an additional worker must also be paid to all other employed workers.
  - D) lies above the labour supply curve because the higher wage paid to an additional worker must also be paid to all other employed workers.

Ans: D Level: Moderate Main Topic: 12.3 Monopsony model Page: 293  
Subtopic: MFC higher than the wage rate Type: Application

Use the following to answer questions 58-59:



58. Refer to the diagram above. If this labour market is perfectly competitive, the wage rate and level of employment respectively will be:
- A) D and E.
  - B) C and E.
  - C) B and G.
  - D) B and F.

Ans: C Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Graphic

59. Refer to the diagram above. If this labour market is monopsonistic, the wage rate and level of employment respectively will be:
- A) D and E.
  - B) C and F.
  - C) B and F.
  - D) A and F.

Ans: D Level: Difficult Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Graphic

## Chapter 12 Wage Determination

Use the following to answer questions 60-65:

Use the factor demand data shown on the left and the factor supply data on the right in answering the following question(s):

<u>Employment</u>	Total	Product		Wage
<u>Employment</u>	<u>product</u>	<u>price</u>	<u>Employment</u>	<u>rate</u>
0	0	\$2.20	0	--
1	15	2.00	1	\$1.00
2	28	1.80	2	2.00
3	39	1.60	3	3.00
4	48	1.40	4	4.00
5	55	1.20	5	5.00
6	60	1.00	6	6.00

60. Refer to the data above. How many workers will this firm choose to employ?

- A) 6
- B) 5
- C) 4
- D) 3

Ans: D Level: Difficult Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Calculation

61. Refer to the data above. How many units of output will the firm produce?

- A) 60
- B) 55
- C) 48
- D) 39

Ans: D Level: Difficult Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Calculation

62. Refer to the data above. What will be the equilibrium wage rate?

- A) \$6
- B) \$5
- C) \$4
- D) \$3

Ans: D Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Application

## Chapter 12 Wage Determination

63. Refer to the data above. What will be the selling price of the product?

- A) \$1.40
- B) \$1.60
- C) \$1.80
- D) \$2.00

Ans: B Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Application

64. Refer to the data above. Suppose severe inflationary pressures prompt the government to impose a wage ceiling of \$2 on this particular type of labour. Other things unchanged, how many workers will the firm now desire to employ?

- A) 6
- B) 5
- C) 4
- D) 3

Ans: C Level: Difficult Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Calculation

65. Refer to the data above. It can be concluded that:

- A) both the product and factor markets are imperfectly competitive.
- B) the factor market is imperfectly competitive but the product market is perfectly competitive.
- C) both the factor and product markets are perfectly competitive.
- D) the factor market is perfectly competitive but the product market is imperfectly competitive.

Ans: A Level: Difficult Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Application

## Chapter 12 Wage Determination

Use the following to answer questions 66-69:

In the table below, assume a monopsonist has the marginal-revenue-product schedule for a particular type of labour given in columns 1 and 2 and that the supply schedule for labour is that given in columns 1 and 3.

(1) Number of <u>Labour units</u>	(2) MRP <u>of labour</u>	(3) Wage <u>rate</u>
1	\$21	\$9
2	19	10
3	17	11
4	15	12
5	13	13
6	11	14
7	9	15
8	7	16

66. Refer to the table and information above. What are the firm's total labour costs if it hires 6 workers?

- A) \$33
- B) \$48
- C) \$65
- D) \$84

Ans: D Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Calculation

67. Refer to the table and information above. What is the marginal labour cost of the fourth worker?

- A) \$13
- B) \$15
- C) \$17
- D) \$19

Ans: B Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Calculation

## Chapter 12 Wage Determination

68. Refer to the table and information above. How many units will the firm hire and what will be the wage rate?
- A) 2 and \$10
  - B) 3 and \$11
  - C) 4 and \$12
  - D) 5 and \$13

Ans: C Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Calculation

69. Refer to the table and information above. If this firm hired labour in a competitive labour market, what would be the wage rate and number of workers hired?
- A) 3 and \$11
  - B) 4 and \$12
  - C) 5 and \$13
  - D) 6 and \$14

Ans: C Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Calculation

Use the following to answer questions 70-73:

In the table below, assume a monopsonist has the marginal-revenue-product schedule for a particular type of labour given in columns 1 and 2 and that the supply schedule for labour is that given in columns 1 and 3.

(1) Number of labor units	(2) MRP of labor	(3) Wage rate
0		
1	\$18	\$ 6
2	16	7
3	14	8
4	12	9
5	10	10
6	8	11

70. Refer to the table and information provided above. What is the firm's total labour cost if it hires 6 workers?
- A) \$24
  - B) \$36
  - C) \$50
  - D) \$66

Ans: D Level: Easy Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Calculation



## Chapter 12 Wage Determination

71. Refer to the table and information provided above. What is the marginal labour cost of the fourth worker?
- A) \$10
  - B) \$12
  - C) \$14
  - D) \$16

Ans: B Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Calculation

72. Refer to the table and information provided above. How many units will the firm hire and what will be the wage rate?
- A) 2 and \$7
  - B) 3 and \$8
  - C) 4 and \$9
  - D) 5 and \$10

Ans: C Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Calculation

73. Refer to the above table and information above. If this firm hired labour in a competitive labour market, what would be the wage rate and number of workers hired?
- A) 3 and \$8
  - B) 4 and \$9
  - C) 5 and \$10
  - D) 6 and \$11

Ans: C Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Calculation

Use the following to answer questions 74-76:

Monopsonist's employment schedule.

Units of labor	Wage rate
9	\$14
10	15
11	18
12	20

## Chapter 12 Wage Determination

74. Refer to the table above. What is the total factor cost for 10 workers?

- A) \$100
- B) \$150
- C) \$198
- D) \$220

Ans: B Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Calculation

75. Refer to the table above. What is the total factor cost for 11 workers?

- A) \$100
- B) \$150
- C) \$198
- D) \$220

Ans: D Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Calculation

76. Refer to the table above. What is the firm's marginal factor cost when it hires the eleventh worker?

- A) \$24
- B) \$48
- C) \$150
- D) \$200

Ans: B Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Calculation

Use the following to answer questions 77-79:

Demand and Supply of Labor Data			
Employment	Total output	Product price	Wage rate
50	708	\$1.27	\$6
51	760	1.26	7
52	810	1.25	8
53	858	1.24	9

## Chapter 12 Wage Determination

77. Refer to the table above. How many units of labour will this firm hire in maximizing its profits?
- A) 50
  - B) 51
  - C) 52
  - D) 53

Ans: B Level: Difficult Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Calculation

78. Refer to the table above. What is the marginal cost for 52 workers?
- A) \$50
  - B) \$51
  - C) \$56
  - D) \$59

Ans: D Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Calculation

79. Refer to the table above. What is the marginal revenue product for 51 workers?
- A) \$45
  - B) \$47
  - C) \$57
  - D) \$59

Ans: C Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Calculation

## Chapter 12 Wage Determination

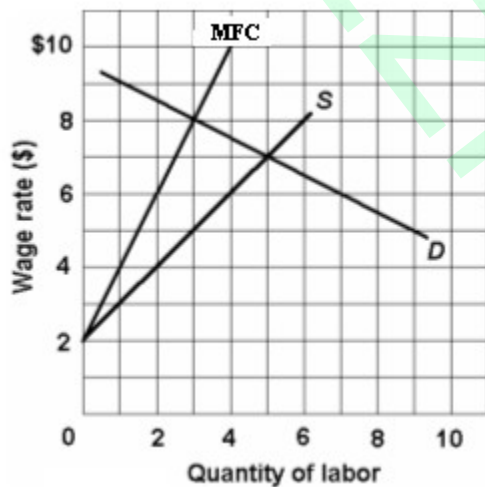
80. A firm's factor input, total output of labour, and product price schedules are given below. If labour is the only variable input, how much labour should the firm employ if the wage rate is \$15 per day?

<u>Units of Labour</u>	<u>Total output/day</u>	<u>Price of good (\$)</u>
2	20	10
3	30	9
4	38	8
5	46	7
6	54	6
7	62	5

- A) 3 units
- B) 4 units
- C) 6 units
- D) 5 units

Ans: D    Level: Difficult    Main Topic: 12.3 Monopsony model    Page: 294  
Subtopic: Equilibrium wage and employment    Type: Calculation

Use the following to answer questions 81-82:



## Chapter 12 Wage Determination

81. Refer to the labour market diagram above where D is the labour demand curve, S is the labour supply curve, and MFC is the marginal factor (labour) cost curve. If this were a perfectly competitive labour market, the equilibrium wage rate and level of employment:
- A) would be \$5 and 3 respectively.
  - B) would be \$6 and 4 respectively.
  - C) would be \$7 and 5 respectively.
  - D) would be \$8 and 3 respectively.

Ans: C Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Graphic

82. Refer to the labour market diagram above where D is the labour demand curve, S is the labour supply curve, and MFC is the marginal factor (labour) cost curve. If this were a monopsonistic labour market, the equilibrium wage rate and level of employment:
- A) would be \$5 and 3 respectively.
  - B) would be \$6 and 4 respectively.
  - C) would be \$7 and 5 respectively.
  - D) would be \$8 and 3 respectively.

Ans: A Level: Difficult Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Graphic

83. In a monopsonistic labour market the employer will maximize profits by employing workers up to that point at which:
- A) the difference between the wage rate and marginal factor(labour) cost is at a maximum.
  - B) marginal revenue product equals marginal factor(labour) cost.
  - C) the wage rate equals marginal revenue product.
  - D) the wage rate equals marginal factor(labour) cost.

Ans: B Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Application

84. A firm can hire six workers at a wage rate of \$8 per hour but must pay \$9 per hour to all of its employees to attract a seventh worker. The marginal wage cost of the seventh worker:
- A) is \$9.
  - B) is \$10.
  - C) is \$15.
  - D) is \$21.

Ans: C Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Calculation

## Chapter 12 Wage Determination

85. In monopsony:

- A) each firm employs a small portion of the total supply of labour.
- B) the work force is highly mobile.
- C) the wage rate paid by the employer varies directly with the number of workers employed.
- D) the employer is a "wage taker."

Ans: C Level: Easy Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Application

86. A monopsonist's wage cost in hiring an additional worker is the:

- A) worker's wage rate.
- B) worker's wage rate plus the wage increases paid to all workers already employed.
- C) worker's wage rate adjusted for the lower price that must be charged for the extra output.
- D) marginal wage cost less the wage rate.

Ans: B Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Application

87. Which of the following is characteristic of monopsony?

- A) The type of labour employed is relatively mobile.
- B) The supply curve for labour lies above the marginal factor cost curve.
- C) The wage rate it must pay workers varies directly with the number of workers it employs.
- D) The firm's employment is a small portion of the total employment of that type of labour.

Ans: C Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Application

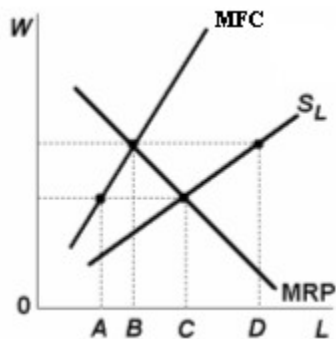
88. A monopsonist:

- A) boosts the wage rate above the competitive level to attract more workers.
- B) reduces the number of workers it employs so that it can pay each worker a lower wage rate.
- C) is a "wage taker."
- D) pays a wage rate equal to MRP.

Ans: B Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Application

## Chapter 12 Wage Determination

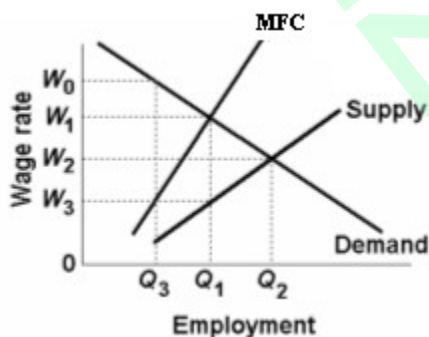
89. The level of employment in the labour market shown below will be:



- A) A.
- B) B.
- C) C.
- D) D.

Ans: B Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
 Subtopic: Equilibrium wage and employment Type: Graphic

Use the following to answer questions 90-91:



90. Refer to the graph above. Under perfectly competitive conditions in the sale of output and hire of labour services the wage rate will be:
- A) W<sub>1</sub> and Q<sub>1</sub> workers will be hired.
  - B) W<sub>2</sub> and Q<sub>2</sub> workers will be hired.
  - C) W<sub>2</sub> and Q<sub>1</sub> workers will be hired.
  - D) W<sub>3</sub> and Q<sub>1</sub> workers will be hired.

Ans: B Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
 Subtopic: Equilibrium wage and employment Type: Graphic

## Chapter 12 Wage Determination

91. Refer to the graph above. Now suppose that through an employers' association firms in this industry establish a monopsony in the hire of labour. In this case the wage rate will be:

- A)  $W_1$  and  $Q_1$  workers will be hired.
- B)  $W_2$  and  $Q_2$  workers will be hired.
- C)  $W_2$  and  $Q_1$  workers will be hired.
- D)  $W_3$  and  $Q_1$  workers will be hired.

Ans: D Level: Difficult Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Graphic

92. Other things equal, the monopsonistic employer will pay a:

- A) lower wage rate and hire fewer workers than will a perfectly competitive employer.
- B) higher wage rate but hire fewer workers than will a perfectly competitive employer.
- C) lower wage rate but hire a larger number of workers than will a perfectly competitive employer.
- D) higher wage rate and hire a larger number of workers than will a perfectly competitive employer.

Ans: A Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Application

93. A monopsonistic employer in an unorganized (non-union) labour market will:

- A) pay a wage rate less than labour's MRP.
- B) pay the same wage rate but hire fewer workers than if the market was perfectly competitive.
- C) hire the number of workers indicated by the intersection of the MFC and the labour supply curves.
- D) pay a wage rate in excess of labour's MRP.

Ans: A Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Application

94. As compared to a perfectly competitive labour market, in a non-unionized monopsonistic labour market wages:

- A) and employment will both be lower.
- B) will be higher, but employment will be lower.
- C) will be lower, but employment will be higher.
- D) and employment will both be higher.

Ans: A Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Application



## Chapter 12 Wage Determination

95. A monopsonist pays a wage rate which is:

- A) less than the MRP of labour.
- B) equal to the firm's marginal factor(labour) cost.
- C) equal to the MRP of labour.
- D) greater than the MRP of labour.

Ans: A Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Application

96. Which of the following is not correct?

- A) Other things equal, a monopsonist will pay a lower wage rate than will a firm hiring labour competitively.
- B) A monopsonistic employer will pay workers a wage rate equal to their MRP.
- C) A perfectly competitive seller will pay workers a wage rate equal to their MRP.
- D) An imperfectly competitive seller will pay workers a wage rate equal to their MRP.

Ans: B Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Application

97. If a firm is a monopsonist in the hire of both labour and capital, it will obtain the profit-maximizing quantities of labour and capital when:

- A)  $MRP_L/P_L = MRP_C/P_C = 1$ .
- B)  $MRP_L/MFC_L = MRP_C/MFC_C = 1$ .
- C) the MRP of labour equals the MRP of capital.
- D) the MFC of labour equals the MFC of capital.

Ans: B Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Formula

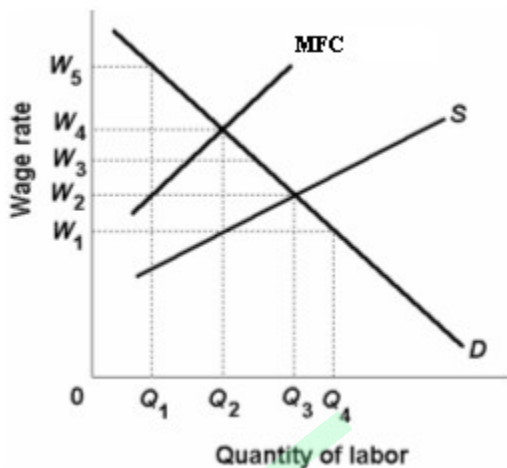
98. If a firm is hiring variable resources D and F in imperfectly competitive input markets, it will maximize profits by employing D and F in such quantities that:

- A)  $MRP_D / MFC_D = MRP_F / MFC_F = 1$ .
- B)  $MRP_D / MFC_D = MRP_F / MFC_F$ .
- C)  $MRP_D / P_D = MRP_F / P_F = 1$ .
- D)  $MRP_D / P_D = MRP_F / P_F$ .

Ans: A Level: Moderate Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Formula

## Chapter 12 Wage Determination

99. Refer to the diagram. Assuming no union or relevant minimum wage, the firm confronting this labour market will:



- A) hire  $Q_2$  workers and pay a  $W_4$  wage rate.
- B) hire  $Q_2$  workers and pay a  $W_1$  wage rate.
- C) hire  $Q_3$  workers and pay a  $W_2$  wage rate.
- D) do none of the above.

Ans: B Level: Difficult Main Topic: 12.3 Monopsony model Page: 294  
Subtopic: Equilibrium wage and employment Type: Graphic

100. Assume the Ajax Mining Company hires 80 percent of the non-union labour force of Winnipeg, Manitoba. Also, suppose that this labour force is highly immobile. Economists would describe this employer as a:

- A) monopolist.
- B) oligopolist.
- C) monopsonist.
- D) monopolistic competitor.

Ans: C Level: Easy Main Topic: 12.3 Monopsony model Page: 294-295  
Subtopic: Examples of monopsony power Type: Application

## Chapter 12 Wage Determination

101. The labour market for teachers in a small, isolated community that has one school district would be best described as a(n):

- A) natural monopoly.
- B) bilateral monopoly.
- C) monopsony.
- D) oligopsony.

Ans: C Level: Easy Main Topic: 12.3 Monopsony model Page: 294-295  
Subtopic: Examples of monopsony power Type: Application

102. Empirical studies suggest that, other things equal, the smaller the number of hospitals in a city, the lower are nurses' wages. This is evidence that:

- A) the labour markets of nurses are perfectly competitive.
- B) hospitals may possess some degree of monopsony power.
- C) the minimum wage does not apply to nurses.
- D) labour unions have been ineffective in increasing the wages of nurses.

Ans: B Level: Moderate Main Topic: 12.3 Monopsony model Page: 294-295  
Subtopic: Examples of monopsony power Type: Application

103. A large hospital in a relatively small city finds that, if its demand for nurses increases, the wages of nurses will rise. We can say that the hospital:

- A) is a monopsonist.
- B) faces a perfectly elastic supply of nurses.
- C) is functioning in a perfectly competitive labour market.
- D) will confront a surplus of nurses.

Ans: A Level: Moderate Main Topic: 12.3 Monopsony model Page: 294-295  
Subtopic: Examples of monopsony power Type: Application

104. The economic term for a sole employer in a non-union community is:

- A) monopsonist.
- B) monopolist.
- C) bilateral competitor.
- D) bilateral monopolist.

Ans: A Level: Easy Main Topic: 12.3 Monopsony model Page: 294-295  
Subtopic: Examples of monopsony power Type: Definition

## Chapter 12 Wage Determination

105. Which of the following is most likely to be an example of monopsony?

- A) the market for fast-food workers in a large summer resort town
- B) the market for card dealers in Las Vegas
- C) the market for major league baseball umpires
- D) the market for retail sales clerks in a major city

Ans: C Level: Easy Main Topic: 12.3 Monopsony model Page: 294-295  
Subtopic: Examples of monopsony power Type: Application

106. A union may increase the demand for the services of its constituents by all of the tactics below except:

- A) successfully increasing labour productivity.
- B) lobbying for increases in public expenditures on the product it is producing.
- C) successfully advertising the product it is producing to private consumers.
- D) increasing the price of products which are complements for the one it is producing.

Ans: D Level: Moderate Main Topic: 12.4 Unions and the labour market: Three models Page: 295 Subtopic: Demand-enhancement model Type: Application

107. Construction workers frequently sponsor political lobbying in support of greater public spending on highways and public buildings. One reason they do this is to:

- A) restrict the supply of construction workers.
- B) increase the elasticity of demand for construction workers.
- C) increase the demand for construction workers.
- D) increase the price of substitute inputs.

Ans: C Level: Moderate Main Topic: 12.4 Unions and the labour market: Three models Page: 295 Subtopic: Demand-enhancement model Type: Application

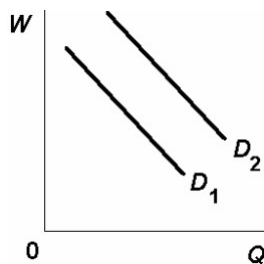
108. Labour unions are restrained in their wage demands because:

- A) legislation limits annual increases in nominal wages to 6 percent.
- B) the labour demand curve is downward sloping.
- C) marginal wage cost curves lie above labour supply curves in most labour markets.
- D) most unions deal with monopsonists who have superior bargaining power.

Ans: B Level: Easy Main Topic: 12.4 Unions and the labour market: Three models Page: 295 Subtopic: Demand-enhancement model Type: Application

## Chapter 12 Wage Determination

109. A shift in union labour demand from  $D_1$  to  $D_2$  in the diagram below might be the result of:



- A) a refusal by union members to buy the product they are producing.
- B) an increase in tariffs on products competing with those produced by relevant union workers.
- C) increases in the prices of complementary inputs.
- D) a strike (work stoppage) by the union.

Ans: B Level: Moderate Main Topic: 12.4 Unions and the labour market: Three models Page: 295 Subtopic: Demand-enhancement model Type: Graphic

110. Which would decrease the demand for a particular type of labour?

- A) an increase in the demand for the products produced by that type of labour
- B) an increase in the prices of the resources that are complements to that type of labour
- C) a decrease in the prices of those resources that are substitutes for that type of labour
- D) an increase in the wages of that type of labour

Ans: B Level: Moderate Main Topic: 12.4 Unions and the labour market: Three models Page: 295 Subtopic: Demand-enhancement model Type: Application

111. A union might increase the demand for the labour services of its members by:

- A) decreasing the demand for the product it is producing.
- B) enhancing the productivity of its members.
- C) decreasing the prices of substitute inputs.
- D) increasing the prices of complementary inputs.

Ans: B Level: Moderate Main Topic: 12.4 Unions and the labour market: Three models Page: 295 Subtopic: Demand-enhancement model Type: Application

## Chapter 12 Wage Determination

112. Unions often oppose increases in the prices of complementary inputs (for example, truck drivers may oppose increases in taxes on diesel fuel). They do this because increases in the prices of complementary inputs might:

- A) increase the supply of competing labour through the output effect.
- B) increase the supply of competing labour through the substitution effect.
- C) decrease the demand for union labour through the output effect.
- D) decrease the demand for union labour through the substitution effect.

Ans: C Level: Moderate Main Topic: 12.4 Unions and the labour market: Three models Page: 295 Subtopic: Demand-enhancement model Type: Application

113. Craft unions:

- A) attempt to organize workers at all skill levels in a firm or industry.
- B) have been declared illegal by federal legislation.
- C) only organize workers who have a particular skill.
- D) attempt to increase the supply of their particular type of labour.

Ans: C Level: Easy Main Topic: 12.4 Unions and the labour market: Three models Page: 296 Subtopic: Exclusive or craft union model Type: Application

114. A craft union:

- A) creates a bilateral monopoly of unskilled and skilled workers in an industry.
- B) organizes workers who have similar skills or jobs in an industry.
- C) is most concerned with increasing the supply for workers.
- D) is most effective in a perfectly competitive industry.

Ans: B Level: Easy Main Topic: 12.4 Unions and the labour market: Three models Page: 296 Subtopic: Exclusive or craft union model Type: Definition

115. Craft unions have typically been most effective in raising wage rates by:

- A) increasing the supply of labour.
- B) increasing the demand for labour.
- C) decreasing the supply of labour.
- D) decreasing the demand for labour.

Ans: C Level: Easy Main Topic: 12.4 Unions and the labour market: Three models Page: 296 Subtopic: Exclusive or craft union model Type: Application

## Chapter 12 Wage Determination

116. Craft unions typically attempt to increase wage rates for their members by:
- A) organizing all of the employees in a factory or industry.
  - B) restricting the supply of skilled workers through worker licensing and training requirements.
  - C) opposing increases in the minimum wage which benefit non-union workers.
  - D) supporting regulations and policies which increase the price of complementary resources.

Ans: B Level: Easy Main Topic: 12.4 Unions and the labour market: Three models Page: 296-297 Subtopic: Exclusive or craft union model  
Type: Application

117. Craft unions typically attempt to increase wage rates by:
- A) imposing an above-equilibrium wage rate on employers.
  - B) increasing the demand for labour.
  - C) decreasing the supply of labour.
  - D) forming a bilateral monopoly.

Ans: C Level: Moderate Main Topic: 12.4 Unions and the labour market: Three models Page: 296-297 Subtopic: Exclusive or craft union model  
Type: Application

118. A craft union attempts to increase wage rates by:
- A) equating the MRP and the MFC curves.
  - B) shifting the labour supply curve to the left.
  - C) shifting the labour supply curve to the right.
  - D) shifting the MRP curve to the right.

Ans: B Level: Moderate Main Topic: 12.4 Unions and the labour market: Three models Page: 296-297 Subtopic: Exclusive or craft union model  
Type: Application

119. Historically, the labour market practices of the Canadian Medical Association:
- A) reduced the demand for physicians' services.
  - B) were similar to those of industrial unions.
  - C) were similar to those of craft unions.
  - D) attempted to reduce the prices of substitute inputs.

Ans: C Level: Easy Main Topic: 12.4 Unions and the labour market: Three models Page: 296-297 Subtopic: Exclusive or craft union model  
Type: Application

## Chapter 12 Wage Determination

120. Which of the following unions best represents the exclusive unionism model?

- A) the mine workers
- B) the teamsters
- C) the carpenters
- D) the steelworkers

Ans: C Level: Moderate Main Topic: 12.4 Unions and the labour market: Three models Page: 296-297 Subtopic: Exclusive or craft union model  
Type: Application

121. The wages of plumbers are likely to increase when:

- A) licensing standards for the occupation are increased.
- B) there is an increase in the cost of plumbing supplies.
- C) the length of the training period for plumbers is decreased.
- D) more do-it-yourself home improvement centers open across the nation.

Ans: A Level: Moderate Main Topic: 12.4 Unions and the labour market: Three models Page: 296-297 Subtopic: Exclusive or craft union model  
Type: Application

122. Occupational licensing has much the same effect as:

- A) inclusive unionism.
- B) exclusive unionism.
- C) bilateral monopoly.
- D) monopsony.

Ans: B Level: Easy Main Topic: 12.4 Unions and the labour market: Three models Page: 296-297 Subtopic: Exclusive or craft union model  
Type: Application

123. Occupational licensing:

- A) functions essentially the same as inclusive unionism.
- B) attracts large numbers of workers and therefore depresses wages.
- C) often restricts occupational entry and raises the incomes of licensees.
- D) has been declared illegal in Canada.

Ans: C Level: Easy Main Topic: 12.4 Unions and the labour market: Three models Page: 296-297 Subtopic: Exclusive or craft union model  
Type: Application



## Chapter 12 Wage Determination

124. Occupational licensing can best be understood in terms of:

- A) the inclusive unionism model.
- B) the exclusive unionism model.
- C) the bilateral monopoly model.
- D) the monopsony model.

Ans: B Level: Easy Main Topic: 12.4 Unions and the labour market: Three models Page: 296-297 Subtopic: Exclusive or craft union model  
Type: Application

125. If an exclusive union is successful in restricting the supply of labour, the:

- A) wage rate will rise.
- B) the quantity of labour demanded will rise:
- C) the number of job opportunities in the firm or industry will increase.
- D) the demand for labour curve will shift leftward.

Ans: A Level: Easy Main Topic: 12.4 Unions and the labour market: Three models Page: 296-297 Subtopic: Exclusive or craft union model  
Type: Application

126. The electricians union is a good example of:

- A) exclusive unionism.
- B) countervailing power.
- C) how unions can simultaneously increase wage rates and employment by increasing the demand for labour.
- D) inclusive unionism.

Ans: A Level: Easy Main Topic: 12.4 Unions and the labour market: Three models Page: 296-297 Subtopic: Exclusive or craft union model  
Type: Application

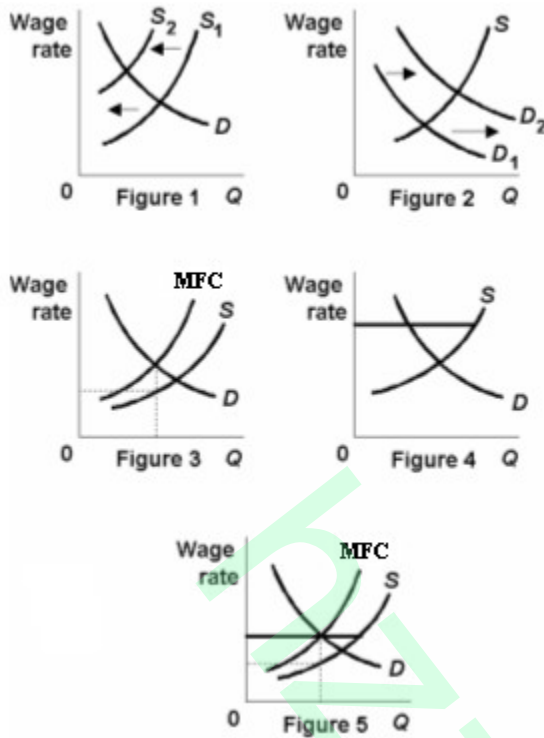
127. Exclusive unionism attempts to increase wage rates by:

- A) decreasing the supply of labour.
- B) setting a minimum or "standard" wage above the competitive level.
- C) increasing the supply of labour.
- D) increasing the demand for labour through productivity increases.

Ans: A Level: Easy Main Topic: 12.4 Unions and the labour market: Three models Page: 296-297 Subtopic: Exclusive or craft union model  
Type: Application

## Chapter 12 Wage Determination

Use the following to answer questions 128-129:



128. Refer to the labour market diagrams above. The tactics of exclusive unionism are portrayed in Figure:

- A) 4.
- B) 3.
- C) 2.
- D) 1.

Ans: D Level: Moderate Main Topic: 12.4 Unions and the labour market: Three models Page: 296-297 Subtopic: Exclusive or craft union model Type: Graphic

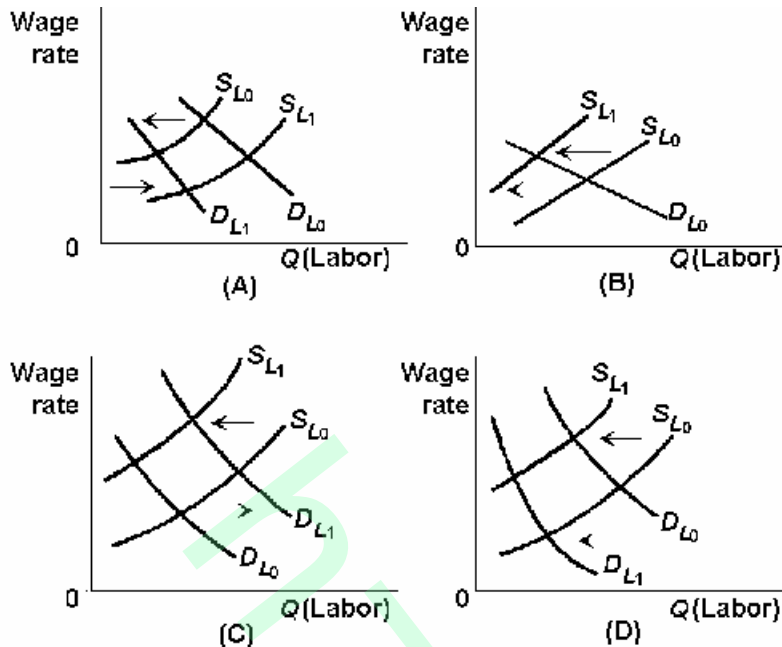
129. Refer to the labour market diagrams above. The economic impact of occupational licensing can best be demonstrated through Figure:

- A) 4.
- B) 3.
- C) 2.
- D) 1.

Ans: D Level: Moderate Main Topic: 12.4 Unions and the labour market: Three models Page: 296-297 Subtopic: Exclusive or craft union model Type: Graphic

## Chapter 12 Wage Determination

130. If union workers decide to take more leisure, while the prices of the products produced by union workers increase, this situation is depicted in panel:



- A) A.  
B) B.  
C) C.  
D) D.

Ans: C Level: Difficult Main Topic: 12.4 Unions and the labour market: Three models Page: 296-297 Subtopic: Exclusive or craft union model Type: Graphic

131. A union composed of all workers in a given plant or industry is called a(n):

- A) closed shop.  
B) craft union.  
C) monopsony union.  
D) industrial union.

Ans: D Level: Easy Main Topic: 12.4 Unions and the labour market: Three models Page: 297 Subtopic: Inclusive or industrial union model Type: Definition

## Chapter 12 Wage Determination

132. An industrial union:

- A) is most concerned with decreasing the supply of workers in an industry.
- B) organizes workers with similar skills or jobs in an industry.
- C) organizes skilled and unskilled workers in an industry.
- D) is most effective in a perfectly competitive industry.

Ans: C Level: Easy Main Topic: 12.4 Unions and the labour market: Three models Page: 297 Subtopic: Inclusive or industrial union model Type: Definition

133. The Canadian Auto Workers is a good illustration of:

- A) how unions have increased wages but reduced job opportunities by shifting the supply-of-labour curve to the left.
- B) how unions have raised wages and increased job opportunities by increasing the demand for labour.
- C) inclusive unionism.
- D) exclusive unionism.

Ans: C Level: Easy Main Topic: 12.4 Unions and the labour market: Three models Page: 297 Subtopic: Inclusive or industrial union model Type: Application

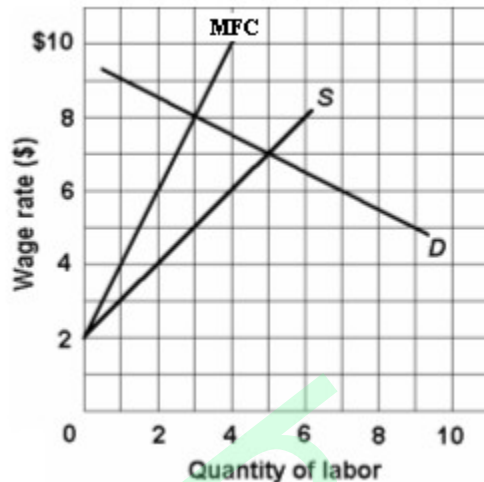
134. Inclusive unionism is practiced mostly by:

- A) professional and semi-professional employees.
- B) small unions comprised of skilled workers, such as the bricklayers.
- C) industrial unions.
- D) craft unions.

Ans: C Level: Easy Main Topic: 12.4 Unions and the labour market: Three models Page: 297 Subtopic: Inclusive or industrial union model Type: Application

## Chapter 12 Wage Determination

135. Refer to the below labour market diagram where  $D$  is the labour demand curve,  $S$  is the labour supply curve, and  $MFC$  is the marginal factor(labour) cost curve. If an inclusive union was able to get the monopsonist to pay a \$6 wage rate, then:



- A) the supply curve would be perfectly elastic for the first four workers, but the MFC curve would be unaffected.
- B) the supply curve would be perfectly elastic for all workers and the MFC curve would coincide with it.
- C) the supply curve would be perfectly elastic for the first four workers and the MFC would be \$6 for the first four workers.
- D) eight workers would be hired.

Ans: C    Level: Difficult    Main Topic: 12.4 Unions and the labour market: Three models    Page: 297-298    Subtopic: Inclusive or industrial union model  
Type: Graphic

## Chapter 12 Wage Determination

Use the following to answer questions 136-137:



136. Refer to the diagram above. An industrial (inclusive) union could increase employment in this labour market:

- A) by negotiating any wage rate between  $W_1$  and  $W_4$ .
- B) by negotiating a wage rate greater than  $W_4$ .
- C) only if it accepted a wage rate below  $W_1$ .
- D) only if it were able to shift the labour demand curve rightward.

Ans: A Level: Moderate Main Topic: 12.4 Unions and the labour market: Three models Page: 297-298 Subtopic: Inclusive or industrial union model Type: Graphic

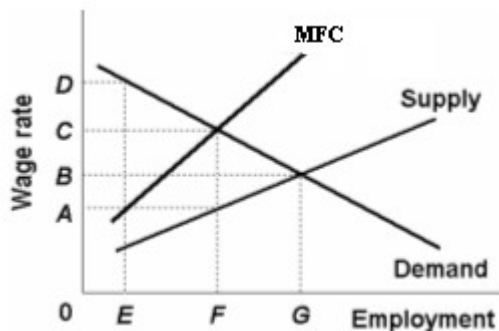
137. Refer to the diagram above. An industrial union could maximize employment by negotiating a wage rate of:

- A)  $W_4$ .
- B)  $W_3$ .
- C)  $W_2$ .
- D)  $W_1$ .

Ans: C Level: Moderate Main Topic: 12.4 Unions and the labour market: Three models Page: 297-298 Subtopic: Inclusive or industrial union model Type: Graphic

## Chapter 12 Wage Determination

Use the following to answer questions 138-139:



138. Refer to the diagram above. Now assume that an inclusive union is formed to bargain with the monopsonistic employer of the previous question. To what level can this union increase the wage rate without causing the number of jobs to decline below that which the monopsonist would otherwise have provided?

A) D minus A  
B) D  
C) C  
D) B

Ans: C Level: Difficult Main Topic: 12.4 Unions and the labour market: Three models Page: 297-298 Subtopic: Inclusive or industrial union model  
Type: Graphic

139. Refer to the diagram above. If an inclusive union seeks to maximize the number of jobs available for its members, what wage rate will it seek to impose on the monopsonist?

A) D minus A  
B) F  
C) C  
D) B

Ans: D Level: Difficult Main Topic: 12.4 Unions and the labour market: Three models Page: 297-298 Subtopic: Inclusive or industrial union model  
Type: Graphic

## Chapter 12 Wage Determination

Use the following to answer questions 140-141:



140. Refer to the labour market diagram above where D is the labour demand curve, S is the labour supply curve, and MFC is the marginal factor (labour) cost curve. If an inclusive union was formed and was able to get the monopsonist to agree to a \$7 wage rate, then the monopsonist would:
- A) reduce employment from 5 to 3 workers.
  - B) reduce employment from 5 to 2 workers.
  - C) increase employment from 3 to 5 workers.
  - D) not alter its level of employment.

Ans: C Level: Difficult Main Topic: 12.4 Unions and the labour market: Three models Page: 297-298 Subtopic: Inclusive or industrial union model Type: Graphic

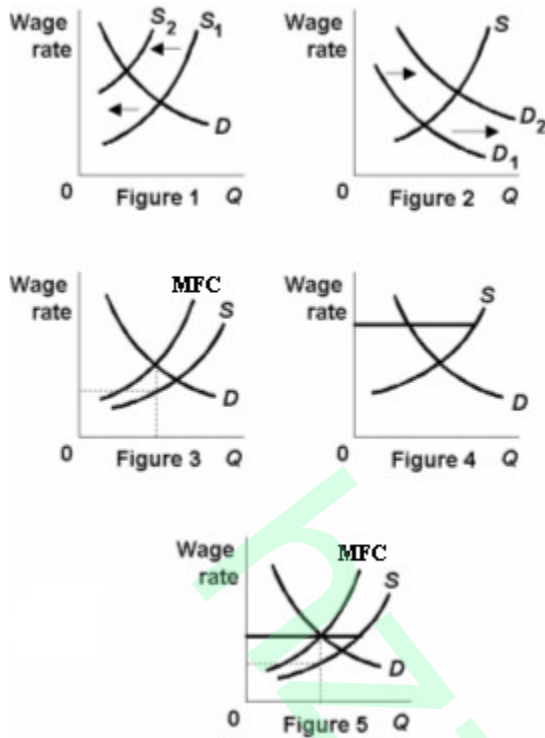
141. Refer to the labour market diagram above where D is the labour demand curve, S is the labour supply curve, and MFC is the marginal factor (labour) cost curve. An inclusive union could increase the level of employment above that which the monopsonist would provide if it could get the monopsonist to agree to any wage rate:
- A) below \$7.
  - B) between \$5 and \$8.
  - C) above \$5.
  - D) above \$8.

Ans: B Level: Difficult Main Topic: 12.4 Unions and the labour market: Three models Page: 297-298 Subtopic: Inclusive or industrial union model Type: Graphic



## Chapter 12 Wage Determination

Use the following to answer question 142:



142. Refer to the labour market diagrams above. The tactics of inclusive unionism are shown in Figure(s):

- A) 5 only.
- B) 3 only.
- C) 4 and 5.
- D) 1 and 2.

Ans: C Level: Difficult Main Topic: 12.4 Unions and the labour market: Three models Page: 297-298 Subtopic: Inclusive or industrial union model Type: Graphic

143. Labour unions may attempt to raise wage rates by:

- A) increasing the supply of labour.
- B) forcing employers, under the threat of a strike, to pay above-equilibrium wage rates.
- C) decreasing the demand for labour.
- D) increasing the price of complementary resources.

Ans: B Level: Moderate Main Topic: 12.4 Unions and the labour market: Three models Page: 298 Subtopic: Wage increases and unemployment Type: Application

## Chapter 12 Wage Determination

144. The unemployment caused by the union-induced wage increases may be reduced by:

- A) less elastic labour demand and the growth of the economy.
- B) more elastic labour demand and the growth of the economy.
- C) less elastic labour demand and more elastic labour supply.
- D) more elastic labour demand and higher wage increases.

Ans: B Level: Moderate Main Topic: 12.4 Unions and the labour market: Three models Page: 298 Subtopic: Wage increases and unemployment Type: Application

145. If an industrial union is formed to bargain with a monopsonistic employer, then in this labour market:

- A) the resulting wage rate will necessarily be above the competitive level.
- B) employment may either increase or decrease.
- C) employment will increase.
- D) employment will decrease.

Ans: B Level: Difficult Main Topic: 12.4 Unions and the labour market: Three models Page: 298 Subtopic: Bilateral monopoly model Type: Application

146. In a labour market characterized by bilateral monopoly the wage rate will:

- A) be logically indeterminate.
- B) be established at the level desired by the union.
- C) be established at the level desired by the employer.
- D) always be established at the competitive level.

Ans: A Level: Moderate Main Topic: 12.4 Unions and the labour market: Three models Page: 298 Subtopic: Bilateral monopoly model Type: Application

147. If a single large employer bargains with an inclusive union, the resulting labour market model can best be described as:

- A) a cartel.
- B) countervailing power.
- C) a bilateral monopoly.
- D) an internal labour market.

Ans: C Level: Easy Main Topic: 12.4 Unions and the labour market: Three models Page: 298 Subtopic: Bilateral monopoly model Type: Definition

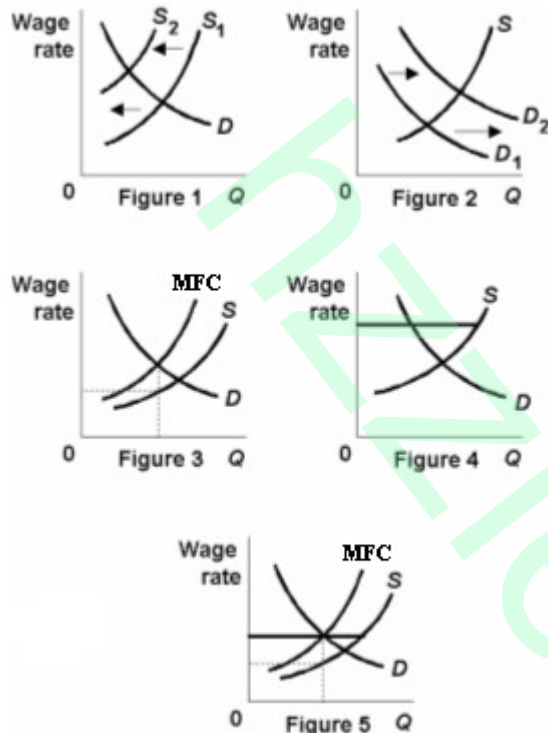
## Chapter 12 Wage Determination

148. When the monopsony model is combined with the inclusive unionism model the result is a case of:

- A) occupational licensing.
- B) Noncompeting groups.
- C) bilateral monopoly.
- D) institutional immobilities.

Ans: C Level: Easy Main Topic: 12.4 Unions and the labour market: Three models Page: 298 Subtopic: Bilateral monopoly model Type: Definition

149. Refer to the below labour market diagrams. The case of bilateral monopoly is represented by Figure:



- A) 5.
- B) 4.
- C) 2.
- D) 1.

Ans: A Level: Difficult Main Topic: 12.4 Unions and the labour market: Three models Page: 298 Subtopic: Bilateral monopoly model Type: Graphic

## Chapter 12 Wage Determination

150. Bilateral monopoly occurs where:

- A) a monopsonistic employer bargains with an inclusive union.
- B) a monopsonistic employer bargains with an exclusive union.
- C) a craft union bargains with a perfectly competitive employer.
- D) an industrial union bargains with a perfectly competitive employer.

Ans: A Level: Easy Main Topic: 12.4 Unions and the labour market: Three models Page: 298 Subtopic: Bilateral monopoly model Type: Definition

151. In a bilateral monopoly, there is:

- A) a craft union competing with an industrial union to organize workers.
- B) a monopolistically competitive firm facing an industrial union.
- C) intensive government regulation and "fair rate of return" pricing.
- D) a monopsonist facing a monopolist.

Ans: D Level: Moderate Main Topic: 12.4 Unions and the labour market: Three models Page: 298 Subtopic: Bilateral monopoly model Type: Definition

152. Critics of minimum-wage legislation argue that it:

- A) keeps inefficient producers in business.
- B) causes unemployment.
- C) undermines incentives to work.
- D) is deflationary.

Ans: B Level: Easy Main Topic: 12.5 The minimum wage controversy Page: 299 Subtopic: Case against the minimum wage Type: Application

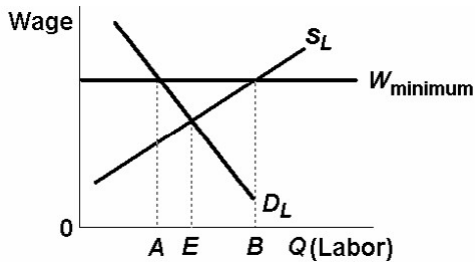
153. Critics of the minimum wage argue that an increase in the minimum wage rate above the equilibrium rate of a perfectly competitive labour market would:

- A) increase unemployment in the labour market.
- B) increase firms' demand for labour.
- C) decrease the supply of labour.
- D) cause firms to substitute labour for capital.

Ans: A Level: Difficult Main Topic: 12.5 The minimum wage controversy Page: 299 Subtopic: Case against the minimum wage Type: Application

## Chapter 12 Wage Determination

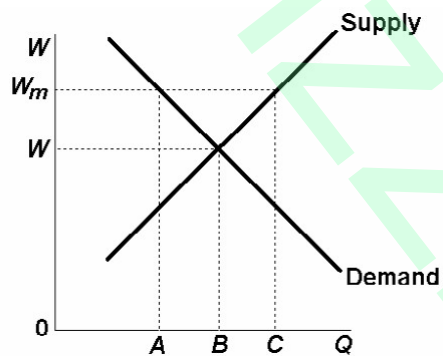
154. In the below graph, unemployment created by the minimum wage is:



- A)  $B - A$ .
- B)  $B - 0$ .
- C)  $B - E$ .
- D) 0.

Ans: A Level: Moderate Main Topic: 12.5 The minimum wage controversy  
Page: 299 Subtopic: Case against the minimum wage Type: Graphic

155. In the labour market shown below, if a minimum wage level is set at  $W_m$ , it will cause:



- A) employment to increase from A to B.
- B) employment to decrease from C to B.
- C) employment to decrease from B to A.
- D) BC workers to be hired.

Ans: C Level: Moderate Main Topic: 12.5 The minimum wage controversy  
Page: 299 Subtopic: Case against the minimum wage Type: Graphic

## Chapter 12 Wage Determination

156. Critics of the minimum wage argue that as an antipoverty device it is "poorly targeted."

By this they mean that:

- A) the minimum wage only applies to a small percentage of the labour force.
- B) many who benefit from the minimum wage are not poor.
- C) the government has been unable to enforce the minimum wage.
- D) the average level of wages in the economy is considerably higher than the minimum wage.

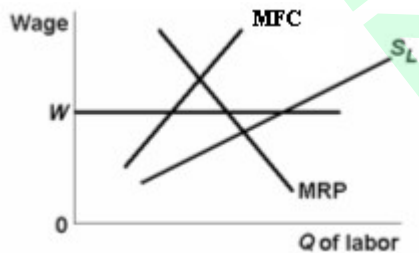
Ans: B Level: Moderate Main Topic: 12.5 The minimum wage controversy  
Page: 299 Subtopic: Case against the minimum wage Type: Application

157. If the minimum wage is effective in a particular labour market, we can expect:

- A) a shortage of labour will result.
- B) that workers will exit that labour market.
- C) a surplus of labour will result.
- D) a decline in wage costs.

Ans: C Level: Easy Main Topic: 12.5 The minimum wage controversy  
Page: 299 Subtopic: Case against the minimum wage Type: Application

158. If a minimum wage is set at  $W$ , what will happen to employment in the monopsonistic labour market shown in the diagram below?

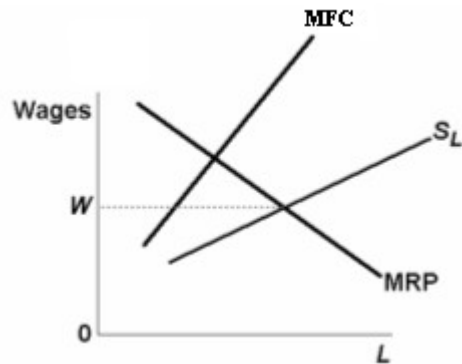


- A) Employment will decrease.
- B) Employment will increase.
- C) Employment will stay the same.
- D) Employment may increase but usually it tends to stay the same.

Ans: B Level: Moderate Main Topic: 12.5 The minimum wage controversy  
Page: 300 Subtopic: Case for the minimum wage Type: Graphic

## Chapter 12 Wage Determination

159. Relevant economic data for Company Town Mining, Inc., is shown below. The labour force (including those not now working) of Company Town organizes and demands a minimum wage,  $W$ , for all workers. If Company Town Inc. accepts the offer it will:

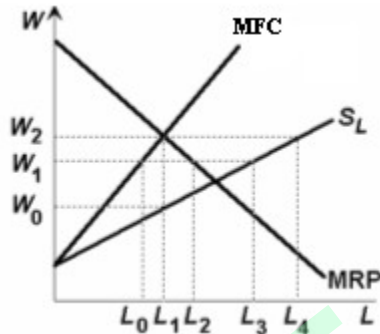


- A) pay lower wages.
- B) hire more workers.
- C) hire fewer workers.
- D) hire the same number of workers.

Ans: B    Level: Moderate    Main Topic: 12.5 The minimum wage controversy  
Page: 300    Subtopic: Case for the minimum wage    Type: Graphic

## Chapter 12 Wage Determination

160. Consider a company town where the ABC Corporation is the only employer. Assume ABC sells its output in a perfectly competitive market. The city council is considering a proposal to lower the minimum wage from its current level of  $W_2$  to  $W_1$ , as shown in the graph above. Given the marginal revenue product of labour (MRP), labour supply ( $S_L$ ), and marginal cost of labour (MFC) curves, this policy would:



- A) increase employment from  $L_1$  to  $L_2$ .
- B) increase employment from  $L_1$  to  $L_3$ .
- C) reduce employment from  $L_4$  to  $L_3$ .
- D) reduce employment from  $L_1$  to  $L_0$ .

Ans: A Level: Difficult Main Topic: 12.5 The minimum wage controversy  
Page: 300 Subtopic: Case for the minimum wage Type: Graphic

161. Minimum-wage legislation is less likely to have adverse effects on employment when the:
- A) affected labour market is monopsonistic.
  - B) shock effect is nonexistent.
  - C) derived demand for labour is shifting to the left.
  - D) affected labour market is perfectly competitive.

Ans: A Level: Easy Main Topic: 12.5 The minimum wage controversy  
Page: 300 Subtopic: Case for the minimum wage Type: Application



## Chapter 12 Wage Determination

162. Unions might support a higher minimum wage because:
- A) their constitutions obligate them to do so.
  - B) they feel a higher minimum wage will lower labour's tax payments for welfare programs.
  - C) a higher minimum wage makes less-skilled workers less substitutable for union workers.
  - D) the minimum wage is better targeted than are alternative income-maintenance programs.

Ans: C Level: Moderate Main Topic: 12.5 The minimum wage controversy  
Page: 300 Subtopic: Case for the minimum wage Type: Application

163. Supporters of the minimum wage contend that it:
- A) reduces the profits of firms in the industry.
  - B) reduces employment in the industry.
  - C) increases labour productivity.
  - D) increases labour turnover.

Ans: C Level: Moderate Main Topic: 12.5 The minimum wage controversy  
Page: 300 Subtopic: Case for the minimum wage Type: Application

164. Economists are frequently critical of the minimum wage because it:
- A) hurts the efforts of labour unions.
  - B) reduces the number of available job opportunities.
  - C) conflicts with policies designed to equalize the distribution of income.
  - D) causes labour shortages in affected markets.

Ans: B Level: Easy Main Topic: 12.5 The minimum wage controversy  
Page: 300 Subtopic: Evidence and conclusions Type: Application

165. Empirical research on the minimum wage suggests that for teenagers an increase in the minimum wage will cause:
- A) no loss of employment because of the shock effect.
  - B) no loss of employment because relevant labour markets are monopsonistic.
  - C) a relatively small percentage decline in employment because labour demand is relatively inelastic.
  - D) a relatively large percentage decline in employment because labour demand is relatively elastic.

Ans: C Level: Moderate Main Topic: 12.5 The minimum wage controversy  
Page: 300 Subtopic: Evidence and conclusions Type: Application

## Chapter 12 Wage Determination

166. Based on studies from the 1990s, the conclusion to be drawn is that the minimum wage:
- A) increases the unemployment of union workers.
  - B) increases the unemployment of unskilled workers.
  - C) decreases the unemployment of unskilled workers.
  - D) has an uncertain effect on the employment of unskilled workers.

Ans: D Level: Moderate Main Topic: 12.5 The minimum wage controversy  
Page: 300 Subtopic: Evidence and conclusions Type: Application

167. If all workers are homogeneous, all jobs are equally attractive to workers, and labour markets are perfectly competitive:
- A) compensating differences would cause wage differentials.
  - B) Noncompeting groups of workers would result in wage differentials.
  - C) all workers would receive the same wage rate.
  - D) worker mobility would occur such that wage differentials would widen.

Ans: C Level: Moderate Main Topic: 12.6 Wage differentials Page: 300-302  
Subtopic: Marginal revenue productivity Type: Application

168. Equilibrium price differentials for productive resources:
- A) tend to be self-eliminating.
  - B) may be caused by differences in the quality of those resources.
  - C) are eliminated when the allocation of resources is in a state of equilibrium.
  - D) are unrelated to differences in nonmonetary benefits.

Ans: B Level: Moderate Main Topic: 12.6 Wage differentials Page: 300-302  
Subtopic: Marginal revenue productivity Type: Application

169. Wage differentials occur for all the following reasons except:
- A) homogeneous workers.
  - B) labour market imperfections.
  - C) Noncompeting groups of workers.
  - D) compensating differences to offset nonmonetary differences in jobs.

Ans: A Level: Moderate Main Topic: 12.6 Wage differentials Page: 300-302  
Subtopic: Marginal revenue productivity Type: Application

## Chapter 12 Wage Determination

170. Why do skilled workers generally earn more than unskilled workers?
- A) The demand for unskilled labour is more inelastic than the demand for skilled labour.
  - B) Skilled labour has higher marginal revenue products than unskilled labour.
  - C) The demand for unskilled labour is greater than the demand for skilled labour.
  - D) The supply of skilled labour is greater than the supply of unskilled labour.

Ans: B Level: Moderate Main Topic: 12.6 Wage differentials Page: 302  
Subtopic: Marginal revenue productivity Type: Application

171. Wage differentials may result from all of the following except:
- A) differences in the nonmonetary aspects of various occupations.
  - B) differences in the education and skills of workers.
  - C) geographic and sociological immobilities of workers.
  - D) the tendency of workers to move from lower pay jobs to higher pay jobs for which they are qualified.

Ans: D Level: Moderate Main Topic: 12.6 Wage differentials Page: 302  
Subtopic: Marginal revenue productivity Type: Application

172. Which of the following factors is not relevant in explaining the persistence of wage differentials?
- A) labour immobilities
  - B) compensating differences
  - C) free public education
  - D) Noncompeting groups

Ans: C Level: Moderate Main Topic: 12.6 Wage differentials Page: 302-303  
Subtopic: Noncompeting groups Type: Application

173. The greater relative scarcity of heart surgeons as compared with clerical workers could be partly accounted for by all of the following except:
- A) a heart surgeon's job requires more specialized skill.
  - B) a heart surgeon derives a greater level of job satisfaction.
  - C) a heart surgeon's entry to the medical profession is more restricted.
  - D) heart surgeons have more education.

Ans: B Level: Moderate Main Topic: 12.6 Wage differentials Page: 302-303  
Subtopic: Noncompeting groups Type: Application

## Chapter 12 Wage Determination

174. "Noncompeting groups" of workers are the result of:
- A) differences in the age-earnings profiles of workers.
  - B) differences in the "job tastes" of workers.
  - C) differences in the innate and acquired abilities of workers.
  - D) geographic immobilities.

Ans: C Level: Moderate Main Topic: 12.6 Wage differentials Page: 302-303  
Subtopic: Noncompeting groups Type: Application

175. What explanation for wage differentials would best explain why superstar athletes in a professional sport are paid significantly more than regular athletes?
- A) Noncompeting groups
  - B) compensating differences
  - C) market imperfections
  - D) principal-agent problems

Ans: A Level: Easy Main Topic: 12.6 Wage differentials Page: 302-303  
Subtopic: Noncompeting groups Type: Application

176. The major reason that presidents of major corporations receive an average salary of over \$1 million a year and truck drivers receive an average salary of about \$50,000 a year can best be explained by:
- A) discrimination.
  - B) lack of job information.
  - C) compensating differences.
  - D) noncompeting labour groups.

Ans: D Level: Moderate Main Topic: 12.6 Wage differentials Page: 302-303  
Subtopic: Noncompeting groups Type: Application

177. Which factor leads to wage differentials?
- A) homogeneous workers
  - B) perfectly competitive labour markets
  - C) investments in human capital by some workers
  - D) workers who are indifferent about which jobs they might hold

Ans: C Level: Easy Main Topic: 12.6 Wage differentials Page: 302-303  
Subtopic: Noncompeting groups Type: Application

## Chapter 12 Wage Determination

178. An expenditure on education and training which improves the skills and therefore the productivity of workers is:
- A) an efficiency wage.
  - B) compensating difference.
  - C) a pay-for-performance plan.
  - D) an investment in human capital.

Ans: D Level: Easy Main Topic: 12.6 Wage differentials Page: 302-303  
Subtopic: Noncompeting groups Type: Application

179. A college graduate who works at a firm is also working part-time on a master's degree in business and expects to be paid a higher wage after earning the degree. The basic reason for this wage differential is:
- A) efficiency wages.
  - B) compensating differences.
  - C) investment in human capital.
  - D) nonmonetary aspects of work.

Ans: C Level: Moderate Main Topic: 12.6 Wage differentials Page: 302-303  
Subtopic: Noncompeting groups Type: Application

180. The concept of investment in human capital indicates that:
- A) union workers are better educated and more productive than non-union workers.
  - B) expenditures on education can be explained in essentially the same way as expenditures on machinery and equipment.
  - C) worker productivity correlates negatively with annual earnings.
  - D) the level of education is unrelated to the level of one's income.

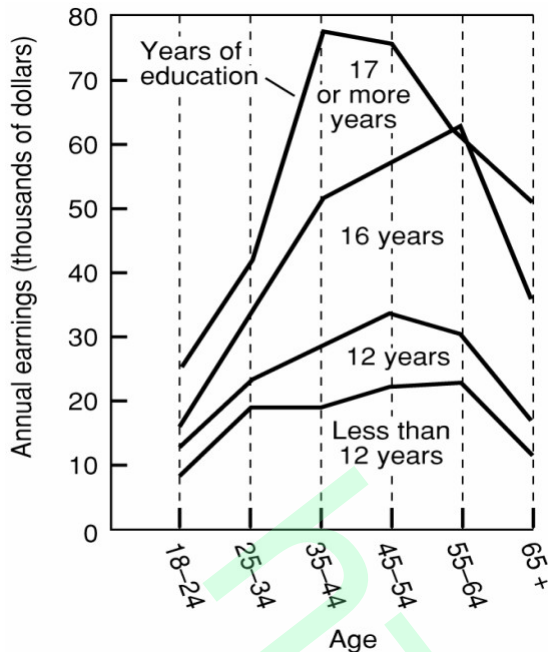
Ans: B Level: Moderate Main Topic: 12.6 Wage differentials Page: 303  
Subtopic: Noncompeting groups Type: Definition

181. Data on education and earnings reveal:
- A) negative age-earnings profiles for male workers.
  - B) no relationship between the two.
  - C) a positive relationship between the two.
  - D) a negative relationship between the two.

Ans: C Level: Easy Main Topic: 12.6 Wage differentials Page: 303  
Subtopic: Noncompeting groups Type: Application

## Chapter 12 Wage Determination

Use the following to answer question 182:



182. The diagram suggests that the earnings of highly educated workers:

- A) rise more slowly than those of less-educated workers.
- B) rise more rapidly than those of less-educated workers.
- C) rise at about the same rate as those of less-educated workers.
- D) stagnate earlier than do those of less-educated workers.

Ans: B Level: Moderate Main Topic: 12.6 Wage differentials Page: 303

Subtopic: Noncompeting groups Type: Graphic

183. Expenditures on education are regarded as investments by economists because:

- A) they are subject to tax deductions at the same rate as are expenditures on machinery and equipment.
- B) education is economically beneficial at the same time it is being acquired.
- C) such expenditures are current costs which are intended to enhance future earnings.
- D) they differ from expenditures on health and worker mobility.

Ans: C Level: Easy Main Topic: 12.6 Wage differentials Page: 303

Subtopic: Noncompeting groups Type: Application

## Chapter 12 Wage Determination

184. Which of the following involves the creation of human capital?

- A) the XYZ Corporation upgrades the machinery on its assembly line
- B) Jones receives apprenticeship training as a carpenter
- C) Smith buys 30 shares of common stock
- D) a retired person decides to re-enter the labour force

Ans: B Level: Moderate Main Topic: 12.6 Wage differentials Page: 303  
Subtopic: Noncompeting groups Type: Application

185. Human capital is best defined as:

- A) the productive skills and knowledge which workers acquire from education and training.
- B) the substitution of labour for machinery in the productive process.
- C) any piece of machinery which must be combined with labour to be productive.
- D) the exchange of money for real assets.

Ans: A Level: Easy Main Topic: 12.6 Wage differentials Page: 303  
Subtopic: Noncompeting groups Type: Definition

186. Compensating differences in wages:

- A) compensate workers for differences in their human capital.
- B) are wage differences which compensate for differences in the desirability of jobs.
- C) describe the tendency for the wages of all occupations to adjust to the median level.
- D) do not exist if jobs have different nonmonetary characteristics.

Ans: B Level: Moderate Main Topic: 12.6 Wage differentials Page: 303  
Subtopic: Compensating differences Type: Definition

187. Suppose all workers are identical, but working for Ajax is more pleasant than working for Acme. In all other nonwage aspects the two firms offer the same job characteristics. We would expect:

- A) wage rates at Ajax to be higher than at Acme.
- B) wage rates at Ajax to be lower than at Acme.
- C) wage rates at Ajax and Acme to be the same.
- D) workers at Ajax would have to be monitored more closely than at Acme.

Ans: B Level: Moderate Main Topic: 12.6 Wage differentials Page: 303  
Subtopic: Compensating differences Type: Application

## Chapter 12 Wage Determination

188. Compensating differences in wages pay workers for:
- A) differences in worker training and skills.
  - B) differences in the nonmonetary characteristics of jobs.
  - C) geographic immobilities.
  - D) discrimination in hiring and firing.

Ans: B Level: Easy Main Topic: 12.6 Wage differentials Page: 303  
Subtopic: Compensating differences Type: Application

189. The idea of "compensating differences" is used:
- A) by inclusive unions as an argument in bargaining for wage rate increases.
  - B) to justify the application of minimum wages to low-wage labour markets.
  - C) to explain the divergence between wage rates and marginal factor cost.
  - D) to explain wage rate differences based on differing nonmonetary aspects of jobs.

Ans: D Level: Moderate Main Topic: 12.6 Wage differentials Page: 303  
Subtopic: Compensating differences Type: Definition

190. The reason that unskilled construction workers typically receive higher wages than retail sales clerks is best explained by:
- A) discrimination.
  - B) geographic immobilities.
  - C) compensating differences.
  - D) noncompeting labour groups.

Ans: C Level: Moderate Main Topic: 12.6 Wage differentials Page: 303  
Subtopic: Compensating differences Type: Application

191. If two jobs (X and Y) are similar, and there is an increase in the nonmonetary benefits of job X, with no change in the nonmonetary benefits of job Y, we would expect:
- A) differences in money wages between jobs X and Y.
  - B) wages to be higher for job X than for job Y.
  - C) workers to move to job X until money wages are the same for both jobs.
  - D) workers to move to job Y until money wages are the same for both jobs.

Ans: A Level: Moderate Main Topic: 12.6 Wage differentials Page: 303  
Subtopic: Compensating differences Type: Application



## Chapter 12 Wage Determination

192. Geographic immobility in the labour force results in:

- A) homogeneous wage rates.
- B) homogeneous unemployment rates.
- C) local labour markets which reach equilibrium quickly and efficiently.
- D) persistent wage and unemployment differentials in different regions of the country.

Ans: D Level: Easy Main Topic: 12.6 Wage differentials Page: 304

Subtopic: Market imperfections Type: Application

193. Which of the following is a market imperfection which might explain persistent wage differentials within an occupation?

- A) geographical immobility of workers
- B) readily available information about job opportunities and pay
- C) principal-agent problems
- D) compensating wage differentials

Ans: A Level: Easy Main Topic: 12.6 Wage differentials Page: 304

Subtopic: Market imperfections Type: Application

194. Which of the following is a market imperfection which might explain persistent wage differentials within an occupation?

- A) movement of labour from lower-wage to higher-wage jobs
- B) readily available information about job opportunities and pay
- C) principal-agent problems
- D) discrimination

Ans: D Level: Easy Main Topic: 12.6 Wage differentials Page: 304

Subtopic: Market imperfections Type: Application

195. The principal-agent problem arises in labour markets because:

- A) a firm may realize excessively large profits.
- B) workers may provide less-than-expected work effort.
- C) compensating wage differences do not pay for differences in the nonmonetary aspects of jobs.
- D) human capital investments vary among workers.

Ans: B Level: Easy Main Topic: 12.7 Pay for performance and the principal-agent problem Page: 305 Subtopic: The principal-agent problem revisited

Type: Application

## Chapter 12 Wage Determination

196. The principal-agent problem arises primarily because:

- A) principals and agents share a common interest, leading to free-rider problems.
- B) principals and agents are in an adversarial role, sharing no common interests.
- C) principals pursue some of their own objectives which may conflict with the objectives of the agents.
- D) agents pursue some of their own objectives which may conflict with the objectives of the principals.

Ans: D   Level: Moderate   Main Topic: 12.7 Pay for performance and the principal-agent problem   Page: 305   Subtopic: The principal-agent problem revisited  
Type: Application

197. Which one of the following best exemplifies the principal-agent problem in the employer-employee relationship?

- A) A worker takes 20 minute coffee-breaks although the employer allots only 15 minutes for this purpose.
- B) A worker is on the job 50 hours per week although only 40 hours are required for promotion.
- C) A worker opts for early retirement in response to the firm's incentive plan.
- D) A worker's productivity is independent of the wage paid.

Ans: A   Level: Moderate   Main Topic: 12.7 Pay for performance and the principal-agent problem   Page: 305   Subtopic: The principal-agent problem revisited  
Type: Application

198. In the context of labour markets "shirking" refers to:

- A) the nonmonetary disadvantages of certain jobs.
- B) the neglecting or evading of work.
- C) the elimination of monitoring costs.
- D) any scheme where pay is directly related to worker output.

Ans: B   Level: Easy   Main Topic: 12.7 Pay for performance and the principal-agent problem   Page: 305   Subtopic: The principal-agent problem revisited  
Type: Definition

## Chapter 12 Wage Determination

199. Shirking can be considered to be a principal-agent problem because:

- A) firms often operate in a monopsonistic labour market.
- B) firms pay seniority wages to workers in a labour market.
- C) the work objectives of the agents diverge from the profit objectives of the principal.
- D) the principal firm in an industry does most of the major collective bargaining for other agents in the industry.

Ans: C Level: Moderate Main Topic: 12.7 Pay for performance and the principal-agent problem Page: 305 Subtopic: The principal-agent problem revisited  
Type: Application

200. Taking unauthorized work breaks would be an example of:

- A) compensating differences.
- B) Noncompeting groups.
- C) piece rate incentives.
- D) shirking.

Ans: D Level: Moderate Main Topic: 12.7 Pay for performance and the principal-agent problem Page: 305 Subtopic: The principal-agent problem revisited  
Type: Application

201. Traveling sales representative Harold Hill only calls on clients four days a week rather than the five days expected by his employer. This is an example of:

- A) equalizing differences.
- B) a nonmonetary job disadvantage.
- C) shirking.
- D) none of the above.

Ans: C Level: Easy Main Topic: 12.7 Pay for performance and the principal-agent problem Page: 305 Subtopic: The principal-agent problem revisited  
Type: Application

202. Paying an above-equilibrium wage rate might reduce unit labour costs by:

- A) permitting the firm to attract lower-quality labour.
- B) increasing the cost to workers of being fired for shirking.
- C) increasing voluntary worker turnover.
- D) increasing the supply of labour.

Ans: B Level: Moderate Main Topic: 12.7 Pay for performance and the principal-agent problem Page: 305 Subtopic: The principal-agent problem revisited  
Type: Application

## Chapter 12 Wage Determination

203. A firm might choose to pay its employees a wage higher than that which would clear the market because:

- A) the higher wage raises the opportunity cost of shirking.
- B) the higher wage may shift the labour demand curve to the left.
- C) the firm will have higher turnover, allowing "new blood" to invigorate older workers who have a greater tendency to shirk.
- D) this policy reduces the proportion of experienced to inexperienced workers, resulting in a lower overall wage bill.

Ans: A Level: Moderate Main Topic: 12.7 Pay for performance and the principal-agent problem Page: 305 Subtopic: The principal-agent problem revisited  
Type: Application

204. For the firm, the major goal of profit sharing plans is to:

- A) force workers to incur some of the business risk.
- B) overcome the monopsony problem of having to pay higher wages to attract additional workers.
- C) overcome the principal-agent problem by better aligning the workers' interests with those of the firm.
- D) create a "shock effect."

Ans: C Level: Easy Main Topic: 12.7 Pay for performance and the principal-agent problem Page: 305 Subtopic: The principal-agent problem revisited  
Type: Application

205. Compensation paid in proportion to the number of units of personal output best describes:

- A) royalties.
- B) profit-sharing.
- C) bonuses.
- D) piece rates.

Ans: D Level: Easy Main Topic: 12.7 Pay for performance and the principal-agent problem Page: 305 Subtopic: The principal-agent problem revisited  
Type: Definition

206. Author Joe Writer receives \$2 per book sold. This payment is a(n):

- A) piece rate.
- B) royalty.
- C) bonus.
- D) example of profit-sharing.

Ans: B Level: Easy Main Topic: 12.7 Pay for performance and the principal-agent problem Page: 305 Subtopic: The principal-agent problem revisited  
Type: Application

## Chapter 12 Wage Determination

207. One of the potential negative side-effects of pay in the form of sales commissions is:

- A) a greater incentive for sales people to engage in unethical or fraudulent sales practices which may eventually cause legal problems for the firm.
- B) increased volatility of sales revenue for the firm.
- C) the potential that pay levels may get so high that they will increase a firm's marginal wage cost more than its marginal revenue product.
- D) an increased likelihood of shirking by workers.

Ans: A Level: Moderate Main Topic: 12.7 Pay for performance and the principal-agent problem Page: 306 Subtopic: Addendum: The negative side effects of pay for performance Type: Application

208. Defenders of the high CEO pay in Canada say that:

- A) the high pay is the outcome of labour supply and labour demand, alone.
- B) CEOs always make good decisions for enhancing productivity
- C) The pay is justified because of direct and indirect marginal revenue contribution of CEOs.
- D) The pay has little relationship to the marginal revenue productivity of CEOs.

Ans: C Level: Easy Main Topic: Last word Page: 306-307  
Type: Application

209. Critics of the high CEO pay in Canada argue that:

- A) the multimillion-dollar **pays are unfair** to ordinary stockholders.
- B) The high pay is like the prizes professional golfers and tennis players receive for winning tournaments.
- C) The supply of CEOs are highly limited and their marginal revenue productivity is enormous.
- D) Only the executives who have consistently made good decisions get to these top positions.

Ans: A Level: Easy Main Topic: Last word Page: 307 Type: Application

210. The rising general level of real wages in Canada has occurred because growing population has increased the supply of labour relative to the demand for it.

Ans: False Level: Easy Main Topic: 12.1 Productivity and the general level of wages Page: 286-287 Type: Application

211. The labour supply curve of a perfectly competitive firm is perfectly inelastic.

Ans: False Level: Easy Main Topic: 12.2 Wages in a perfectly competitive labour market Page: 290 Type: Application

## Chapter 12 Wage Determination

212. A monopsonistic employer may sell its product in a competitive market.

Ans: True   Level: Easy   Main Topic: 12.3 Monopsony model   Page: 291  
Type: Application

213. Marginal factor (labour) cost will exceed the wage rate when there is imperfect competition in the hire of labour.

Ans: True   Level: Easy   Main Topic: 12.3 Monopsony model   Page: 293  
Type: Application

214. Marginal factor (labour) cost will always exceed the wage rate when the employer is selling its product in an imperfectly competitive market.

Ans: False   Level: Easy   Main Topic: 12.3 Monopsony model   Page: 293  
Type: Application

215. The monopsonist in a non-unionized labour market pays a wage rate below the MRP of labour.

Ans: True   Level: Moderate   Main Topic: 12.3 Monopsony model   Page: 294  
Type: Application

216. Restricting the supply of labour is a means of increasing wage rates more commonly used by industrial unions than craft unions.

Ans: False   Level: Moderate   Main Topic: 12.4 Unions and the labour market:  
Three models   Page: 296-297   Type: Application

217. Industrial unions are more likely to increase wage rates by restricting the supply of labour than are craft unions.

Ans: False   Level: Moderate   Main Topic: 12.4 Unions and the labour market:  
Three models   Page: 296-297   Type: Application

218. Occupational licensing is a means of decreasing the supply of specific kinds of labour.

Ans: True   Level: Moderate   Main Topic: 12.4 Unions and the labour market:  
Three models   Page: 297   Type: Application

## Chapter 12 Wage Determination

219. Inclusive unions restrict the number of jobs directly by shifting the labour supply curve to the left; exclusive unions restrict the number of jobs by imposing above-equilibrium wage rates on the employer.

Ans: False   Level: Moderate   Main Topic: 12.4 Unions and the labour market:  
Three models   Page: 297   Type: Application

220. Critics of the minimum wage contend that higher minimums cause employers to move up their labour demand curves, causing unemployment among low-wage workers.

Ans: True   Level: Moderate   Main Topic: 12.5 The minimum wage controversy  
Page: 299   Type: Application

221. Advocates of the minimum wage argue that its effects should be analyzed within the context of a dynamic and imperfectly competitive labour market.

Ans: True   Level: Easy   Main Topic: 12.5 The minimum wage controversy  
Page: 300   Type: Application

222. "Noncompeting groups" of workers are the result of geographic immobilities.

Ans: False   Level: Easy   Main Topic: 12.6 Wage differentials   Page: 302  
Type: Application

223. Human capital investment refers to spending on education and worker training.

Ans: True   Level: Easy   Main Topic: 12.6 Wage differentials   Page: 303  
Type: Definition

224. The principal-agent problem in labour markets arises because of the possibility of shirking by workers.

Ans: True   Level: Easy   Main Topic: 12.7 Pay for performance and the principal-agent problem   Page: 305   Type: Application

225. "Shirking" refers to the possibility that workers will provide less-than-expected effort on the job.

Ans: True   Level: Easy   Main Topic: 12.7 Pay for performance and the principal-agent problem   Page: 305   Type: Definition

## Chapter 12 Wage Determination

226. Seniority pay is the same as piece rate pay.

Ans: False    Level: Easy    Main Topic: 12.7 Pay for performance and the principal-agent problem    Page: 305    Type: Definition

Unauthorized