

## Homework #6

1. The short run is:
  - A. a period less than month.
  - B. a period less than a year.
  - C. not a measure of time, but a measure of flexibility of factors to respond to changes in market conditions.
  - D. is a time period that varies by occupation and/or industry but is sufficiently short so that workers cannot change occupations, locations, and firms have a fixed plant capacity.
  - E. both (C) and (D).
  
2. The marginal product of labor is the:
  - A. change in revenue resulting from adding an additional unit of labor.
  - B. change in output resulting from adding an additional unit of labor.
  - C. change in labor necessary to produce an additional unit of output.
  - D. cost of additional labor necessary to produce an additional unit of output.
  
3. The marginal revenue product of labor is the:
  - A. change in labor necessary to produce an additional unit of output.
  - B. cost of additional labor necessary to produce an additional unit of output.
  - C. change in output resulting from adding an additional unit of labor.
  - D. change in revenue resulting from adding an additional unit of labor.
  
4. If the price of output increases, the marginal revenue product curve will shift \_\_\_\_\_ and the profit maximizing quantity of labor demanded will \_\_\_\_\_.
  - A. up; increase
  - B. up; decrease
  - C. down; increase
  - D. down; decrease
  
5. The equilibrium level of employment for the firm is determined where:
  - A.  $W=MRP$ .
  - B.  $W=P*MP_L$ .
  - C. the additional benefit of hiring a unit of labor is equal to its additional cost.
  - D. all of the above.
  
6. The supply of labor is:
  - A. backward-bending in an industry.
  - B. negatively sloped for an individual if the substitution effect is greater than the income effect.
  - B. positively sloped over all possible wages for an individual.
  - D. none of the above.

Table 9.1: Production of Tony's tulips

Number of workers	Units of output
2	100
3	160
4	210
5	250
6	280
7	300
8	310

7. Refer to Table 9.1. The marginal product of the third unit of labor is:

- A. 30
- B. 53.333
- C. 60
- D. 160

8. Refer to Table 9.1. If the price of output is \$4 per unit, the marginal revenue product of the fifth unit of labor is:

- A. \$40
- B. \$50
- C. \$160
- D. \$200

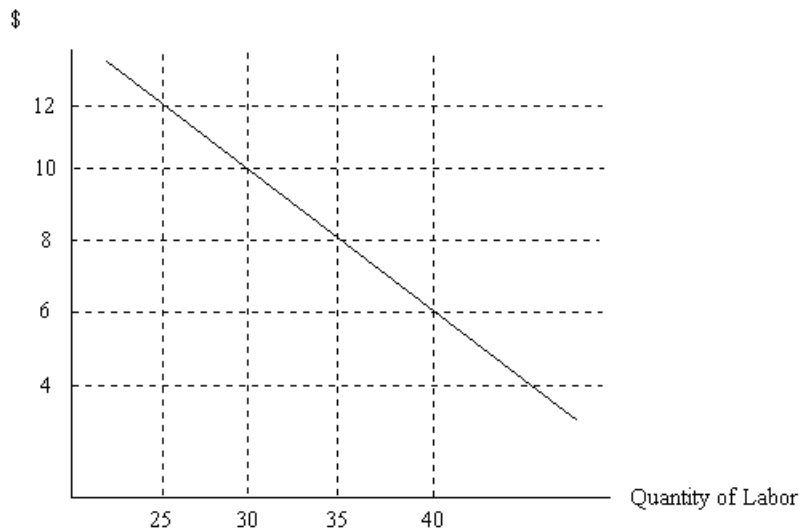


Figure 9.1

9. Figure 9.1 presents a firm's marginal revenue product curve. If the output price is \$2, what is the marginal product of the 30th hour of labor?

- A. 5
- B. 4
- C. 3
- D. Cannot be determined from the information given.

10. In the event of a minimum wage above the equilibrium wage, wages will \_\_\_\_\_ and total employment will \_\_\_\_\_.

- A. fall; fall
- B. fall; rise
- C. rise; fall
- D. rise; rise

11. If the minimum wage is set below the equilibrium wage:

- A. the quantity demanded of workers will equal the quantity supplied.
- B. the quantity demanded of workers will be less than the quantity supplied.
- C. the quantity demanded of workers will be greater than the quantity supplied.
- D. wages will rise and total employment will rise.

12. One reason that professional baseball players earn higher incomes than college professors is that:

- A. the training costs to enter the baseball profession are low.
- B. there are no barriers to entry in the baseball profession.
- C. college professors face a very high risk of death.
- D. few people have the skill to play professional baseball.

13. Undesirable job features lead to a \_\_\_\_\_ labor \_\_\_\_\_.

- A. lower; demand
- B. lower; supply
- C. higher; demand
- D. higher; supply

14. The substitution effect:

- A. indicates that a person should substitute towards leisure when the wage decreases.
- B. always implies that the individual labor supply has a positive slope.
- C. is smaller than the income effect when an individual's labor supply has a negative slope.
- D. all of the above.

15. Competitive labor markets yield:

- A. efficiency within a particular labor market in the short run.
- B. efficiency between markets in the long run.
- C. both (A) and (B).
- D. neither (A) or (B).

16. The income effect:

- A. always implies that the individual labor supply has a positive slope.
- B. is larger than the substitution effect when an individual's labor supply has a negative slope.
- C. results from the fact that an increase in the wage raises a person's real income and their demand for leisure.
- D. both (B) and (C).

17. The disemployment effect from a minimum wage results because:

- A. new workers enter the labor market due to the fact that the minimum wage is now above their reservation wage.
- B. the higher minimum wage causes persons who had a job before the minimum wage to no longer have a job.
- C. occurs jointly with unemployment effect to lead to a reduction in employment after an increase in the minimum wage.
- D. both (A) and (C).
- E. both (B) and (C).

18. The minimum wage tends to \_\_\_\_\_ the wage and \_\_\_\_\_ employment in the uncovered sector.

- A. raise, raise.
- B. raise, lower.
- C. lower, raise.
- D. lower, lower.

19. Suppose that you won the lottery and it paid you equal monthly payments that summed to 23 million dollars over the next 20 years. The present value of the prize is:

- A. actually more than 23 million dollars because you can stick your winnings in an interest earning asset.
- B. actually less than 23 million dollars because the dollar payments received in the future are worth less (i.e., must be discounted) than the dollar payments received today.
- C. 23 million dollars because generally the rate of inflation is just offset by the discount rate.
- D. unknown because discount rates are sometimes positive and sometimes negative depending on whether we are in a recession or a boom.

20. Markets, if left on their own, tend to under-provide financing for human capital because:

- A. physical capital can be used as collateral against default while human capital generally cannot.
- B. human capital does not provide an obvious externalities to third parties.
- C. human capital has historically had a lower rate of return than physical capital.
- D. the return to human capital tends not to be quantifiable.