Microeconomics
Instructor Miller
Practice Problems Labor Market

1. What is a factor market?
A) It is a market where financial instruments are traded.
B) It is a market where stocks and bonds are traded.
C) It is a market where producers buy consumption and capital goods.
D) It is a market where resources used to produce final goods are traded.

2. The demand for labor is described as a derived demand because
A) it is derived by workers seeking to earn income to fund the consumption of goods and services.
B) it is derived by producers seeking to make profits by starting new businesses.
C) it is derived from the demand for products that use labor in the production process.
D) it is derived from government institutions which rely on labor markets for the purpose of raising tax revenue.

3. The demand for labor depends primarily on the additional output produced as a result of hiring an additional worker and
A) the additional revenue received from selling the output produced as a result of hiring an additional worker.
B) the payment made to the worker for producing the additional output.
C) the elasticity of demand for the output produced by the worker.
D) the number of workers willing to produce the additional output.

4. What is the difference between a firm's marginal revenue and its marginal revenue product?
A) Marginal revenue is the change in sales revenue from selling one more unit of output while marginal revenue product is the profit earned from hiring one more worker.
B) Marginal revenue is the change in sales revenue from selling one more unit of output while marginal revenue product is the change in total revenue from hiring one more worker.
C) Marginal revenue is the increase in revenue when a firm raises its output price while marginal revenue product is the increase in marginal product when a firm hires an additional worker.
D) There is no difference between the two terms.

5. The demand curve for labor is also
A) the demand curve for the output produced with labor since the demand for labor is a derived demand.
B) the marginal product of labor curve.
C) the marginal revenue product of labor curve.
D) the supply curve for the output labor is used to produce.
6. A firm should hire more workers to increase its profits if
   A) the marginal product of labor is greater than the wage the firm will pay these workers.
   B) the wage rate is less than the marginal revenue product of labor.
   C) there is enough capital and other resources for the workers to use.
   D) the demand for labor is elastic.

7. As more output is produced, the marginal product of labor declines
   A) because of the law of diminishing returns.
   B) if firms reduce the wage paid to labor.
   C) if the firm's output supply curve is inelastic.
   D) because the firm's marginal revenue declines.

8. A firm's demand curve for labor slopes downwards because
   A) of the law of diminishing marginal returns.
   B) firms supply less labor as the wage rate rises.
   C) workers supply less labor services as the wage rate falls.
   D) of rising marginal product.

9. Refer to the above fire. If the wage rate is $40, how many workers should Dale hire?
   A) 6 units
   B) 5 units
   C) 4 units
   D) 3 units
10. Refer to the above figure. If Dale can sell her doilies at $2 each, what is the marginal product of the 5th worker?
A) $28
B) 28 doilies
C) 14 doilies
D) $56

11. Refer to the above figure. Suppose the market price of doilies rises to $3. What happens to the curve given in the diagram?
A) Nothing, because labor's productivity has not changed.
B) There will be a movement along the curve.
C) The curve shifts to the right.
D) We cannot answer the question without knowing if Dale would want to hire more workers.

12. Suppose a competitive firm pays a wage of $12 an hour and sells its product at $3 per unit. Assume that labor is the only input. If hiring another worker would increase output by five units per hour, then to maximize profits the firm should
A) not change the number of workers it currently hires.
B) lay off some of its workers.
C) hire the additional worker.
D) There is not enough information to answer the question.

13. Suppose a competitive firm is paying a wage of $12 an hour and sells its product at $3 per unit. Assume that labor is the only input. If hiring another worker would increase output by three units per hour, then to maximize profits the firm should
A) not change the number of workers it currently hires.
B) not hire an additional worker.
C) hire another worker.
D) There is not enough information to answer the question.

14. If a worker can produce 20 units of output which can be sold for $4 per unit, what is the maximum wage that firm should pay to hire this worker?
A) $80
B) $80 minus the firm's profit markup
C) It depends on what the going wage rate is in the labor market.
D) There is insufficient information to answer the question.
15. Let \( MP \) = marginal product, \( P \) = output price, and \( W \) = wage, then the equation that represents the condition where a competitive firm would hire another worker is

A) \( P \times W = MP \).
B) \( P \times MP < W \).
C) \( P \times MP > W \).
D) \( P \times W > MP \).

16. Marginal revenue product can be calculated using the formula marginal product × output price

A) only if output price is constant.
B) only if the marginal product of labor is constant.
C) only if the both marginal product of labor and the output price are constant.
D) only if the firm has market power in the labor market.

17. An increase in a perfectly competitive firm's demand for labor could be caused by

A) a decrease in the market wage rate.
B) an increase in the market demand for the firm’s product.
C) a decrease in the marginal product of workers.
D) an increase in the quantity of labor supplied.

18. Which of the following will not cause the labor demand curve to shift to the right?

A) an increase in the price of the firm’s product
B) a technological improvement that increases labor productivity
C) an increase in human capital in the labor force
D) an increase in the market wage rate

19. How will an increase in population affect the labor market?

A) It will shift the market supply curve.
B) It will cause a decrease in the quantity of labor demanded.
C) It will increase the supply of jobs.
D) It will increase the opportunity cost of leisure.

20. All of the following will shift the labor supply curve except

A) an increase in labor force participation rate among women.
B) an increase in the average age of retirement.
C) an increase in the wage rate.
D) a change in a country’s immigration policy.
21. If Molly Bee increases her work hours when her wage increases, then
A) the income effect of the wage increase outweighs the substitution effect.
B) the substitution effect of the wage increase outweighs the income effect.
C) leisure is an inferior good to Molly.
D) Molly is spending beyond her means.

22. If Alan Shaw reduces his work hours when his salary increases, then
A) the income effect of his salary increase dominates the substitution effect.
B) the substitution effect of his salary increase dominates the income effect.
C) the income effect of his salary increase is completely offset by the substitution effect.
D) leisure is an inferior good to Alan.

23. The combined effect (both income and substitution) of a wage increase is that
A) the substitution effect always dominates, leading to more work at a higher wage.
B) the income effect always dominates, leading to less work at a higher wage.
C) if the substitution effect outweighs the income effect, the labor supply curve slopes upward, but if the income effect outweighs the substitution effect, the labor supply curve is backward bending.
D) if the substitution effect outweighs the income effect, the labor supply curve is backward bending, but if the income effect outweighs the substitution effect, the labor supply curve slopes upward.

24. What happens to the equilibrium wage and quantity of labor if output price rises?
A) The equilibrium wage and the equilibrium quantity of labor rise.
B) The equilibrium wage and the equilibrium quantity of labor fall.
C) The equilibrium wage falls and the equilibrium quantity of labor rises.
D) The equilibrium wage rises and the equilibrium quantity of labor falls.

25. Consider the market for opticians. What is likely to happen to the equilibrium wage and quantity of opticians if more and more people turn to laser eye surgery instead of wearing glasses or contact lens?
A) The equilibrium wage and the equilibrium quantity of opticians rise.
B) The equilibrium wage and the equilibrium quantity of opticians fall.
C) The equilibrium wage rises and the equilibrium quantity of opticians falls.
D) The equilibrium quantity falls and the equilibrium wage of opticians rises.
26. Consider the market for pilots. What is likely to happen to the equilibrium wage and quantity of pilots if the government enforces a lower mandatory retirement age, say from age 65 to age 62?
A) The equilibrium wage and the equilibrium quantity of pilots rise.
B) The equilibrium wage and the equilibrium quantity of pilots fall.
C) The equilibrium wage falls and the equilibrium quantity of pilots rises.
D) The equilibrium wage rises and the equilibrium quantity of pilots falls.

27. Suppose the following two events occur in the market for elementary school teachers:
a. Overcrowded schools and education budget cuts have discouraged young college students from pursuing careers in teaching.
b. With an increasing birth rate, the number of children entering the elementary school system is expected to increase significantly over the next ten years.

What is likely to happen to the equilibrium wage and quantity of teachers as a result of these two events?
A) The equilibrium quantity and the equilibrium wage of elementary school teachers fall.
B) The equilibrium wage rises and the effect on the equilibrium quantity of elementary school teachers is indeterminate.
C) The equilibrium quantity falls and the effect on the equilibrium wage of elementary school teachers is indeterminate.
D) The equilibrium quantity falls and the equilibrium wage of elementary school teachers rises.

28. Painters who paint water towers earn higher wages relative to painters who paint houses because
A) the demand for tower painters is greater than the demand for residential painters.
B) painting water towers is more risky than painting houses.
C) the tower painters' union is probably more powerful than the house painters' union.
D) the supply of water tower painters exceeds the supply of house painters.

29. If national laws protecting the health and safety of workers completely eliminate any and all risk, then
A) workers in risky occupations become better off.
B) compensating wage differentials disappear and workers in risky occupations may be no better off.
C) compensating differentials would grow because workers could not be compensated by being given lower risk jobs.
D) more people would be employed.
30. One reason why the average salary of Major League Baseball players is higher than the average salary of college professors is
A) the careers of most baseball players are much shorter than the careers of most college professors.
B) the marginal revenue product of baseball players is greater than the marginal revenue product of college professors.
C) college professors accept lower salaries in exchange for better working conditions.
D) competition among baseball club owners forces player salaries to be much higher than the players' marginal revenue products.

31. Wage differences can be explained by all of the following except
A) compensating differentials.
B) differences in marginal revenue products.
C) economic discrimination.
D) comparable worth.