# Unit 5.2 Changes in Factor Demand and Supply

AP Microeconomics Homework

## Question Bank

### 1. Question Bank Q4

Assume that firms providing health-care services to older people operate in a perfectly competitive market. What must happen in the market for health-care workers if there is an increase in the number of older people in a country?

(A) The demand for health-care workers will increase.

(B) The marginal factor cost in the health-care industry will decrease.

(C) The number of health-care workers will decrease.

(D) The quality of health-care services will increase.

(E) The wages of health-care workers will decrease.

### 2. Question Bank Q17

Which of the following will shift the demand curve for a factor of production to the left?

(A) A decrease in the price of the factor of production

(B) A decrease in the price of a substitute factor of production

(C) An increase in the price of the product produced by the factor

(D) An increase in the marginal product of the factor

(E) An improvement in technology used by the factor of production

### 3. Question Bank Q21

Which of the following is most likely to increase the supply of soldiers for an all-volunteer army?

(A) A decrease in the salaries paid to soldiers

(B) A decrease in the average wage rate in civilian employment

(C) A reduction in college tuition benefits provided by soldiers

(D) The imposition of new restrictions on women in the military

(E) An increase in the required length of service

### 4. Question Bank Q28

Which of the following would cause the wage for computer programmers to increase?

(A) A decrease in the amount of physical capital per computer programmer
(B) An improvement in the education of computer programmers

(C) An increase in the social prestige associated with being a computer programmer

(D) A decrease in the value that computer programmers place on leisure

(E) A minimum wage set below the equilibrium wage in the market for computer programmers

### 5. Question Bank Q37

An increase in the demand for automobiles will cause the demand for skilled automobile workers and the wage rate of skilled automobile workers to change in which of the following ways?

| | **Demand For Workers** | **Wage Rate** |
|---|---|---|
| (A) | Decrease | Increase |
| (B) | Decrease | Not change |
| (C) | Increase | Decrease |
| (D) | Increase | Increase |
| (E) | Not change | Increase |

### 6. Question Bank Q41

Motivated by lower import prices, United States manufacturers increase their imports of steel from other steel-producing countries. Which of the following best describes the impact of the increased steel imports on the labor market for steelworkers in the United States?

(A) Jobs in the United States steel industry will become less attractive, so wages will have to increase in this market to attract more workers to the United States steel industry.

(B) Domestic steel prices will fall, leading to an increase in sales of domestically produced steel, which increases demand and employment of steelworkers.

(C) The supply of steelworkers will increase, lowering the steelworker wage in the United States.

(D) The supply of steelworkers will decrease, increasing the steelworker wage in the United States.

(E) The demand for United States steelworkers will decline, putting downward pressure on steelworker wages.

### 7. Question Bank Q42

When labor supply in a competitive labor market increases, the equilibrium wage rate and employment will change in which of the following ways?

| | Wage Rate | Employment |
|---|---|---|
| (A) | Increase | Increase |
| (B) | Increase | Decrease |
| (C) | Decrease | Increase |
| (D) | Decrease | Decrease |
| (E) | Decrease | No change |

### 8. Question Bank Q85

Which of the following is most likely to shift the demand for aircraft mechanics to the right?

(A) An increase in the demand for air travel

(B) An increase in the price of a license necessary for aircraft mechanics

(C) A decrease in the price of a license necessary for aircraft mechanics

(D) A decrease in the demand for air travel

(E) A decrease in the marginal productivity of aircraft mechanics

### 9. Question Bank Q86

For a competitive labor market, an increase in which of the following will lead to an increase in the demand for labor?

(A) The supply of labor

(B) The minimum wage

(C) The cost of medical benefits provided to the labor hired by firms

(D) Labor union dues

(E) The demand for the good that labor produces

### 10. Question Bank Q88

Which of the following is most likely to cause the demand curve for nurses to shift to the right?

(A) An increase in the number of nurses graduating from nursing schools

(B) An increase in nursing schools' tuition

(C) An increase in the number of hospitals that employ nurses

(D) A decrease in the marginal productivity of nurses

(E) An improvement in the health of older people

### 11. Question Bank Q89

Which of the following is likely to shift an industry's labor supply curve to the left?

(A) A decrease in immigration restrictions

(B) A decrease in the cost of child care

(C) An increase in the number of remote-working jobs

(D) An increase in preference for leisure

(E) An increase in wages

### 12. Question Bank Q102

Assume labor and capital are substitute inputs. A manufacturer will employ more labor if

(A) the price of labor increases

(B) the marginal product of labor decreases

(C) the price of capital increases

(D) the marginal product of capital increases

(E) the product's demand decreases

### 13. Question Bank Q105

If a large number of unskilled workers enter the labor market, which of the following is most likely to occur in the labor market for unskilled workers?

(A) The supply curve will shift to the right and the wage rate will decrease.

(B) The supply curve will shift to the left and the wage rate will increase.

(C) The demand curve will shift to the right and the wage rate will increase.

(D) The demand curve will shift to the left and the wage rate will decrease.

(E) There will be a movement up along the demand curve and the wage rate will increase.

### 14. Question Bank Q106

Suppose that people who work in the paint industry face a great risk of developing an incurable disease. A medical breakthrough that eliminates the risk will most likely cause which of the following shifts in the supply and demand curves for workers in the paint industry?

| | **Supply Curve** | **Demand Curve** |
|---|---|---|
| (A) | Shift right | No shift |
| (B) | Shift left | No shift |
| (C) | Shift right | Shift left |
| (D) | Shift left | Shift right |
| (E) | No shift | Shift left |

### 15. Question Bank Q108

Which of the following will result in an increase in labor demand?

(A) An increase in the wage rate
(B) An increase in the productivity of labor
(C) A decrease in the price of the product that labor is used to produce
(D) A decrease in the wage rate
(E) A decrease in the demand for the product produced by labor

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## Past Exam Questions

### 16. 2022 AP Micro MCQ Q23

Which of the following statements most accurately describes the relationship between corn, an output, and machines, an input, that are used to gather corn?

(A) The price of machines used to gather corn increases when the demand for corn increases.
(B) The price of machines used to gather corn decreases when the demand for corn increases.
(C) The price of machines used to gather corn increases when the demand for corn decreases.
(D) The price of machines used to gather corn increases when the price of wheat, a producer substitute for corn, increases.
(E) The price of machines used to gather corn is unrelated to the demand for corn.

### 17. 2022 AP Micro MCQ Q25

Consider two groups of workers in competitive labor markets. Workers in group X have a skill set unique to producing computers, and workers in group Y have a skill set that can be used to produce either computers or smartphones. When the price of smartphones decreases, the wages paid to workers producing smartphones decrease. Which of the following could happen to the wages of workers in group X?

(A) There would be no change in wages because workers in group X do not have the skills to produce smartphones.
(B) There would be no change in wages because the supply of and demand for workers producing computers would both shift to the left.
(C) Wages would decrease because the supply of workers producing computers would increase, with more workers from group Y seeking jobs with firms producing computers.
(D) Wages would decrease because the supply of workers producing computers would decrease, with more workers from group X seeking training to qualify for jobs with firms producing smartphones.
(E) Wages would increase because workers in group X have specialized skills.

### 18. 2023 AP Micro MCQ Q45

Robots and workers are substitutes in production and are both variable inputs. Both robots and workers are hired in perfectly competitive factor markets. If the daily rental price of robots increases, which of the following will most likely happen to wages paid to workers and the number of workers employed in the short run?

| | **Wages** | **Number of Workers Employed** |
|---|---|---|
| (A) | Decrease | Decrease |
| (B) | Decrease | Increase |
| (C) | Increase | Decrease |
| (D) | Increase | Increase |
| (E) | No change | No change |

### 19. 2025 AP Micro MCQ Q35

Which of the following changes will increase the equilibrium market wage for plumbers?

(A) A decrease in the market price of plumbing services

(B) A decrease in the amount of vacation time taken by plumbers

(C) A decrease in the productivity of plumbers

(D) An increase in the fees for plumber licenses required to practice plumbing

(E) An increase in the quality of working conditions for plumbers

### 20. 2025 AP Micro MCQ Q54

Shrimp and chicken are substitute inputs in the production of frozen meals. Both shrimp and chicken are sold in perfectly competitive markets. If the government imposes a per-unit tax on shrimp, how will the demand for chicken and the equilibrium price of frozen meals be affected in the short run?

| | **Demand for Chicken** | **Equilibrium Price of Frozen Meals** |
|---|---|---|
| (A) | Increase | Increase |
| (B) | Increase | Decrease |
| (C) | Increase | No change |
| (D) | Decrease | Increase |

### 21. 2025 AP Micro MCQ Q56

Donatello operates a firm that sells frozen treats in a perfectly competitive market. Which of the following would explain why Donatello is hiring more workers this year than last year?

(A) Other firms have opened more stores selling frozen treats.

(B) The government imposed a per-unit tax on consumers of frozen treats.

(C) The government removed a quota on imported frozen treats.

(D) There was an increase in demand for frozen treats.

(E) There was a decrease in the price of frozen treats.

#### 22. 2021 AP Micro MCQ Q8

Suppose the market for health-care workers is perfectly competitive. Which of the following will happen in the market for health-care workers in the short run if the demand for health care increases?

(A) The supply curve of health-care workers will shift to the right.

(B) The supply curve of health-care workers will shift to the left.

(C) The demand curve for health-care workers will shift to the right.

(D) The demand curve for health-care workers will shift to the left.

(E) Neither the demand curve nor the supply curve of health-care workers will shift.

### 23. 2024 AP Micro MCQ Q49

The labor market for medical assistants is perfectly competitive. Which of the following would cause the supply curve of medical assistants to shift to the right?

(A) An increase in the number of retired medical assistants

(B) A decrease in the number of hours worked by medical assistants

(C) A decrease in the expected future wages paid to medical assistants

(D) A decrease in the requirements for medical assistant certification

(E) A decrease in the number of students enrolled in medical assistant programs