Unit 5.2 Changes in Factor Demand and Factor Supply

AP Microeconomics Homework — Past Exam Questions Only — 10 Questions

MCQ — Past Exam Questions

1. 2022 AP Micro MCQ Q20

Heggood, Inc., a perfectly competitive firm, produces hats using capital and labor purchased in competitive factor markets. If the demand for hats increases, Heggood, Inc. will

(A) decrease the price of hats

(B) decrease its demand for labor

(C) decrease the quantity of labor demanded

(D) increase its demand for capital

(E) increase the rental price of capital

2. 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.

3. 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.

4. 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

5. 2023 AP Micro MCQ Q58

Which of the following reasons could explain why a firm might hire fewer workers?

(A) A decrease in the wage rate

(B) A decrease in labor productivity

(C) An increase in the price of a substitute input

(D) An increase in the price of the firm's product

(E) An increase in demand for the firm's product

6. 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

7. 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

8. 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.

FRQ — Past Exam Questions

9. 2021 AP Micro FRQ Q2(d)

Context: Schmitt Inc. provides car parking services in a perfectly competitive output market and hires labor in a perfectly competitive input market. The market price per car parked is $10, the daily market wage per worker is $100, and fixed costs are $50 per day.

Number of Workers	**Number of Parked Cars**
0	0

1	8
2	20
3	34
4	45
5	54
6	60
7	63

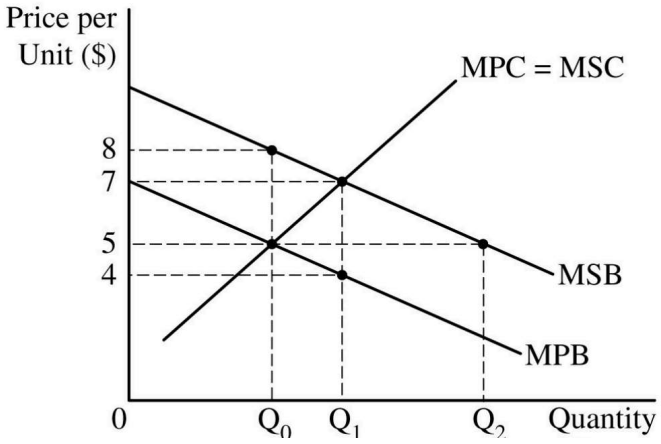
(d) Suppose new legislation requires each worker in the parking industry to purchase an individual insurance policy at the worker's expense in order to legally park cars.

(i) Will the market wage paid by a typical firm in this industry increase, decrease, or stay the same in the long run?

(ii) For a typical firm in the industry, will the number of workers hired in the short run increase, decrease, or stay the same? Explain.

10. 2022 AP Micro FRQ Q2(c)–(d)

Context: Bueno is a firm that produces and sells guava, a type of fruit. The market for guava is perfectly competitive. The marginal private benefit (MPB), marginal private cost (MPC), marginal social benefit (MSB), and marginal social cost (MSC) curves are illustrated in the graph provided.



(c) Assume the guava market is in short-run equilibrium and Bueno hires workers in a perfectly competitive labor market at a wage of $20 per hour. The marginal product of the last worker hired was 6 units of guava per hour.

(i) Calculate the change in Bueno's profit per hour from the last worker hired. Show your work.

(ii) Suppose that the government decides to provide a per-unit subsidy to consumers who buy guava. How would the per-unit subsidy affect Bueno's marginal revenue product curve? Explain.

(d) Instead of hiring workers in a perfectly competitive labor market, assume Bueno hires workers in a monopsony labor market. Will the number of workers hired increase, decrease, or stay the same? Explain.