

AP[®]

 CollegeBoard

2020 Exam Sample Questions

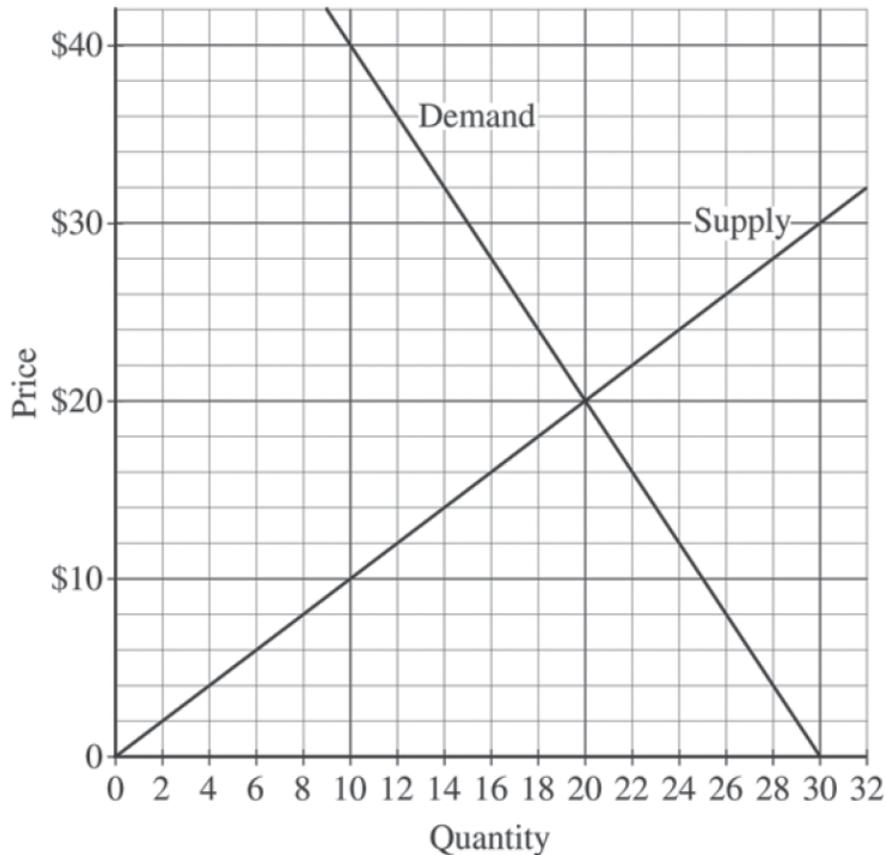
AP[®] MICROECONOMICS

Sample Question 1: Two Short Questions

(Questions taken from: 2015 and 2007 AP[®] Microeconomics Exams)

Allotted time: 25 minutes (plus 5 minutes to submit)

The graph below shows the market for widgets. The government is considering intervening in this market.



- Calculate the total producer surplus at the market equilibrium price and quantity. Show your work.
- If the government imposes a price floor at \$16, is there a shortage, a surplus, or neither? Explain.
- If instead the government imposes a price ceiling at \$12, is there a shortage, a surplus, or neither? Explain.
- If instead the government restricts the market output to 10 units, calculate the deadweight loss. Show your work.

Assume the price decreases from \$20 to \$12.

- Calculate the price elasticity of demand. Show your work.
- In this price range, is demand perfectly elastic, relatively elastic, unit elastic, relatively inelastic, or perfectly inelastic?

Two airline companies, Airtouch and Windward, operate a route from City X to City Y, transporting a mix of passengers and freight. They must file their schedules with the National Transportation Board each year and cannot alter them during that year. Those schedules are revealed only after both companies have filed. Each airline must choose between a morning and an evening departure. The relevant payoff matrix appears below, with the first entry in each cell indicating Airtouch's daily profit and the second entry in each cell indicating Windward's daily profit.

		Windward	
		Morning	Evening
Airtouch	Morning	\$1,000, \$700	\$700, \$600
	Evening	\$750, \$950	\$900, \$800

- (g) In which market structure do these firms operate? Explain.
- (h) If Windward chooses an evening departure, which departure time is better for Airtouch?
- (i) Identify the dominant strategy for Windward.
- (j) Is choosing an evening departure a dominant strategy for Airtouch? Explain.
- (k) If both firms know all of the information in the payoff matrix but do not cooperate, what will be Windward's daily profit?

Sample Question 2: Long Question

(Question taken from: 1995 AP Microeconomics Exam)

Allotted time: 15 minutes (plus 5 minutes to submit)

Peaches and nectarines are substitute goods, and both are produced under conditions of competitive long-run equilibrium.

Joyce, a producer in the peach industry, discovers a technological breakthrough that only reduces the cost of producing peaches. Explain how the change in technology will affect each of the following for Joyce.

- (a) Quantity of peaches produced
- (b) Price of peaches
- (c) Short-run profits

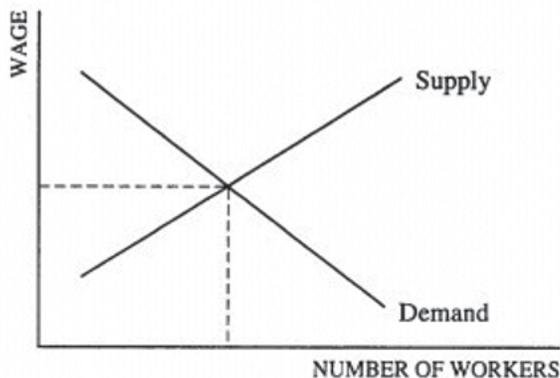
Now assume that all other peach-producing firms adopt the new technology. Explain how the adoption of the new technology will affect each of the following in the peach-producing industry.

- (d) Price of peaches
- (e) Quantity of peaches produced

This new technology is not applicable to the production of nectarines. Explain how the changes that occurred in the peach industry will affect each of the following in the nectarine industry.

- (f) Price of nectarines
- (g) Quantity of nectarines

LABOR MARKET FOR NECTARINE WORKERS



The graph above depicts the supply and demand curves for workers in the nectarine industry before the technological breakthrough in the peach industry.

Explain how the technological breakthrough in the peach industry will affect each of the following in the labor market for nectarine workers.

- (h) Wage rate for nectarine workers
- (i) Number of nectarine workers hired