

Supply & Demand Classwork

Principles of Microeconomics

July 18, 2025

Instructions

Please answer on a separate sheet of paper and submit on Gradescope by the end of class. You must turn in the required problems. You may turn in the bonus problems for extra credit on tomorrow's quiz.

Required

1. "An increase in demand for notebooks raises the quantity of notebooks demanded but not the quantity supplied." Is this statement true or false. Please explain in a sentence.
2. The market for pizza has the following demand and supply schedules:

Price	Quantity Demanded	Quantity Supplied
\$4	135 pizzas	26 pizzas
5	104	53
6	81	81
7	68	98
8	53	110
9	39	121

- (a) What is the equilibrium price and quantity in this market?
 - (b) If the actual price in this market were *above* the equilibrium price, what would drive the market toward the equilibrium?
 - (c) If the actual price in this market were *below* the equilibrium price, what would drive the market toward the equilibrium?
3. Consider the following events: Scientists reveal that eating oranges decreases the risk of diabetes, and at the same time, farmers use a new fertilizer that makes orange trees produce more oranges. Please illustrate what effect these changes have on the equilibrium price and quantity of oranges, and summarize your diagram in a sentence.
 4. Because bagels and cream cheese are often eaten together, they are complements.

- (a) We observe that both the equilibrium price of cream cheese and the equilibrium quantity of bagels have risen. What could be responsible for this pattern – a fall in the price of flour or a fall in the price of milk? Please draw a supply-and-demand diagram and summarize it in a sentence.
- (b) Suppose instead that the equilibrium price of cream cheese has risen but the equilibrium quantity of bagels has fallen. What could be responsible for this pattern – a rise in the price of flour or a rise in the price of milk? Please illustrate your answer and summarize your diagram in a sentence.
5. Suppose that the price of baseball tickets at your future college is determined by market forces. Currently the demand and supply schedules are as follows:

Price	Quantity Demanded	Quantity Supplied
\$4	10,000 tickets	8,000 tickets
8	8,000	8,000
12	6,000	8,000
16	4,000	8,000
20	2,000	8,000

- (a) What is unusual about this supply curve? Why might this be the case?
- (b) What are the equilibrium price and quantity of tickets?
- (c) Your future college plans to increase total enrollment next year by 5,000 students. The additional students will have the following demand schedule:

Price	Quantity Demanded
\$4	4,000 tickets
8	3,000
12	2,000
16	1,000
20	0

What will be the new equilibrium price and quantity next year? Please show the relevant calculations.

Bonus

6. Ketchup is a complement (as well as a condiment) for hot dogs. If the price of hot dogs rises, what happens to the market for ketchup? For tomatoes? For tomato juice? For orange juice. Please explain in up to four sentences and four supply-and-demand diagrams.

7. Suppose that global demand for kombucha is $Q_D = 144 - 12P$, and global supply is $Q_S = 16 + 4P$.
- (a) What is the equilibrium in the global kombucha market?
 - (b) Suppose domestic (i.e. not foreign) demand for kombucha is $Q_D = 80 - 8P$, and suppose foreign demand increases by 50%. What is the new equilibrium price in the global kombucha market?