

2. Supply and Demand

Starter Quiz · 课前小测

AP Microeconomics

Name: _____ Score: _____

1. The law of demand says that, other things equal, when price rises the quantity demanded:
☐ falls
☐ rises
☐ stays the same
☐ doubles
2. The law of supply says that, other things equal, when price rises the quantity supplied:
☐ rises
☐ falls
☐ stays the same
☐ becomes negative
3. Price elasticity of demand is calculated as:
☐ % change in quantity demanded $\div$ % change in price
☐ % change in price $\div$ % change in quantity demanded
☐ price $\times$ quantity
☐ change in quantity $\div$ change in price
4. Price elasticity of supply is normally:
☐ positive, because price and quantity supplied move together
☐ negative, because price and quantity move apart
☐ always zero
☐ always exactly one
5. Two goods have a **positive** cross-price elasticity. They are:
☐ substitutes
☐ complements
☐ both inferior goods
☐ unrelated
6. Price rises from 4 to 6; quantity demanded falls from 120 to 80. Using the midpoint method, what is |PED|?

7. Price rises causing a 30% rise in quantity supplied and a 10% rise in price. What is PES?

8. Printers and ink are complements, so their cross-price elasticity is negative.
☐ True ☐ False

9. Demand is $P = 20 - Q$ and supply is $P = 2 + Q$. What is the equilibrium quantity Q ?

10. Equilibrium is 5 dollars and 100 units. A price ceiling of 3 dollars gives quantity demanded 140 and quantity supplied 70. What is the size of the shortage?

_____ units

AP Microeconomics

1. **falls**

Price and quantity demanded move in opposite directions — an inverse relationship.

2. **rises**

Price and quantity supplied move in the same direction — a direct relationship.

3. **% change in quantity demanded ÷ % change in price**

PED divides the percentage change in quantity by the percentage change in price.

4. **positive, because price and quantity supplied move together**

Supply obeys a direct relationship, so PES is positive.

5. **substitutes**

Positive XED: a dearer Y sends buyers to X — the goods substitute for each other.

6. **1**

$\% \Delta Q = -40/100 = -0.40$ and $\% \Delta P = 2/5 = 0.40$, so $PED = -1$ and $|PED| = 1$ (unit elastic).

7. **3**

$PES = 30\% \div 10\% = 3$ — elastic supply.

8. **True**

A dearer printer lowers ink demand — a negative XED marks complements.

9. **9**

Set $20 - Q = 2 + Q$, so $18 = 2Q$ and $Q = 9$.

10. **70 units**

Shortage = quantity demanded — quantity supplied = $140 - 70 = 70$.