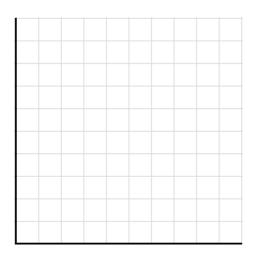
## CONCEPT: QUANTITATIVE ANALYSIS OF PRICE CEILINGS AND PRICE FLOORS: FINDING POINTS

- We are sometimes asked to calculate quantity supplied and quantity demanded with price floors and ceilings.
  - □ Steps for calculating quantity supplied and quantity demanded with price floors and ceilings:
    - Step 1: Find Equilibrium Price and Quantity by setting QD = QS
    - Step 2: Confirm that the price floor/ceiling is "effective"
      - > A price ceiling must be \_\_\_\_\_\_ equilibrium price to be effective
      - > A price floor must be \_\_\_\_\_ equilibrium price to be effective
    - Step 3: If effective, plug the floor/ceiling price into each equation and solve for QD and QS
    - Step 4: If not effective, the answer is the equilibrium price and quantity

**EXAMPLE:** Calculate quantity supplied and quantity demanded if a price ceiling of \$1,000 was put into effect.



 $Q_D = 3,000,000 - 1,000P$ 

 $Q_S = 1,300P - 450,000$ 

**PRACTICE:** The supply and demand curves for a product are as follows. What is quantity demanded if a price floor of \$21 is set?

a) 2

 $Q_D = 45 - 2P$ 

b) 3

 $Q_S = -15 + P$ 

- c) 4
- d) 5
- e) 6

**PRACTICE:** The supply and demand curves for a product are as follows. What is quantity supplied if a price ceiling of \$4 is set?

- a) 150
- $Q_D = 600 100P$
- b) 200
- $Q_S = -150 + 150P$
- c) 300
- d) 450
- e) 600