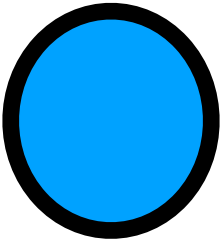
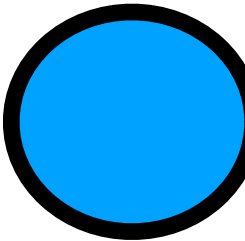
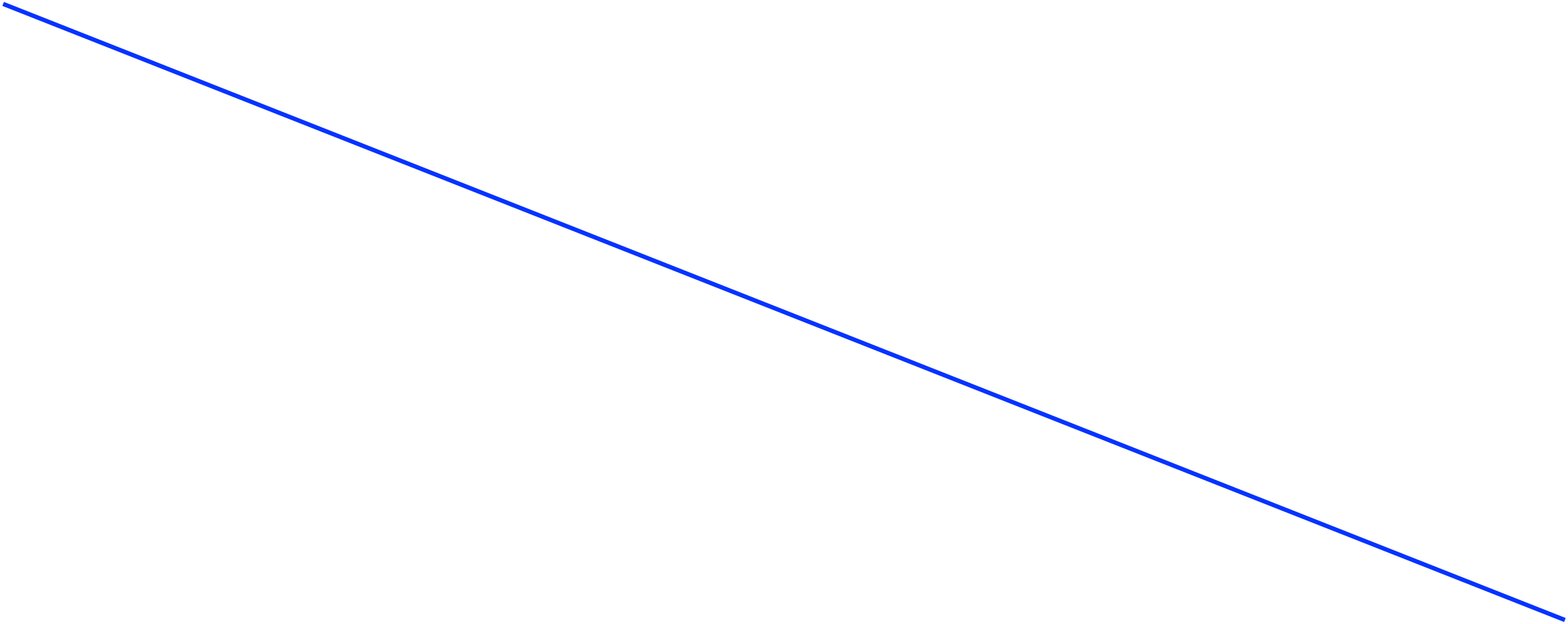
$$Q^d = 20 - 2P_e$$



10

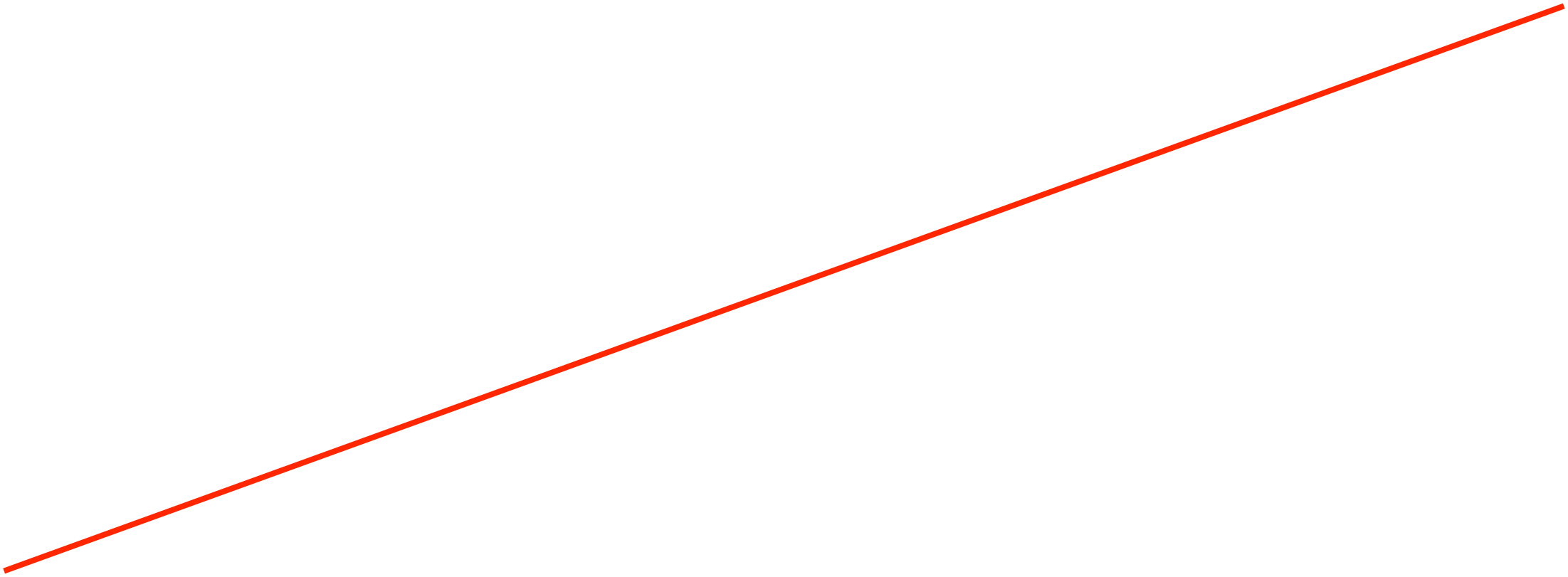


20

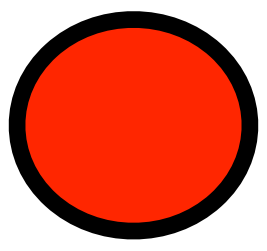


Demand

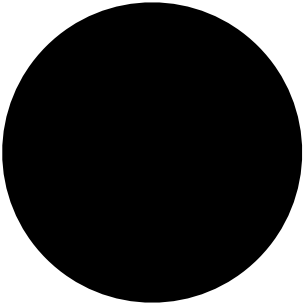

3

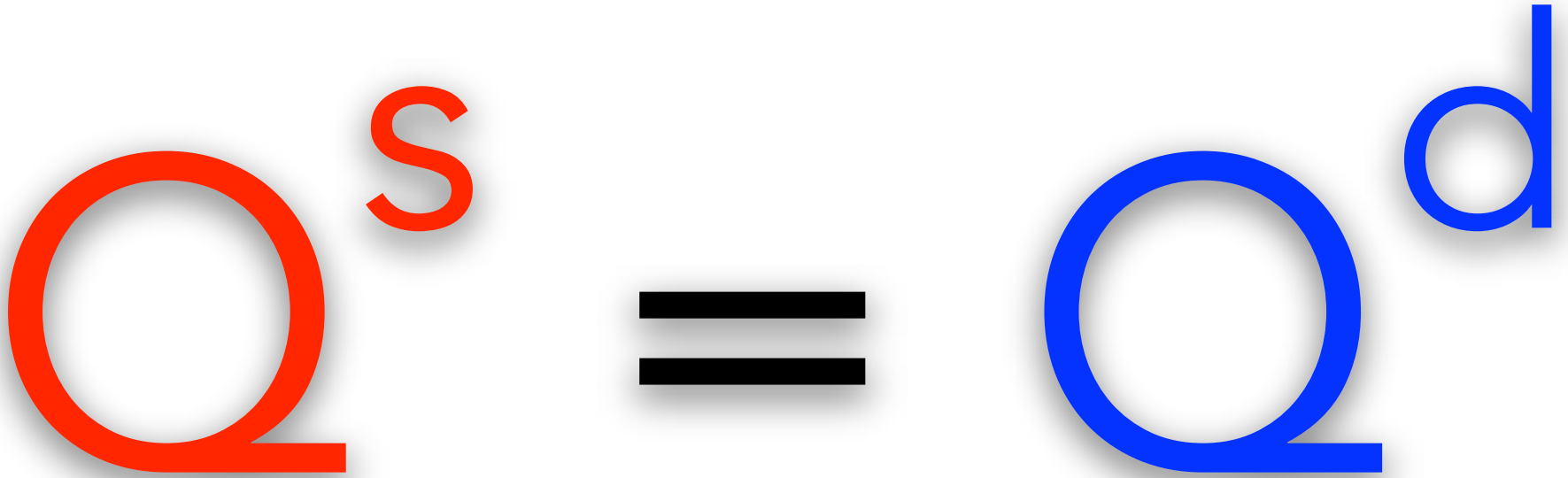


Supply



$$Q^s = -15 + 5P_e$$



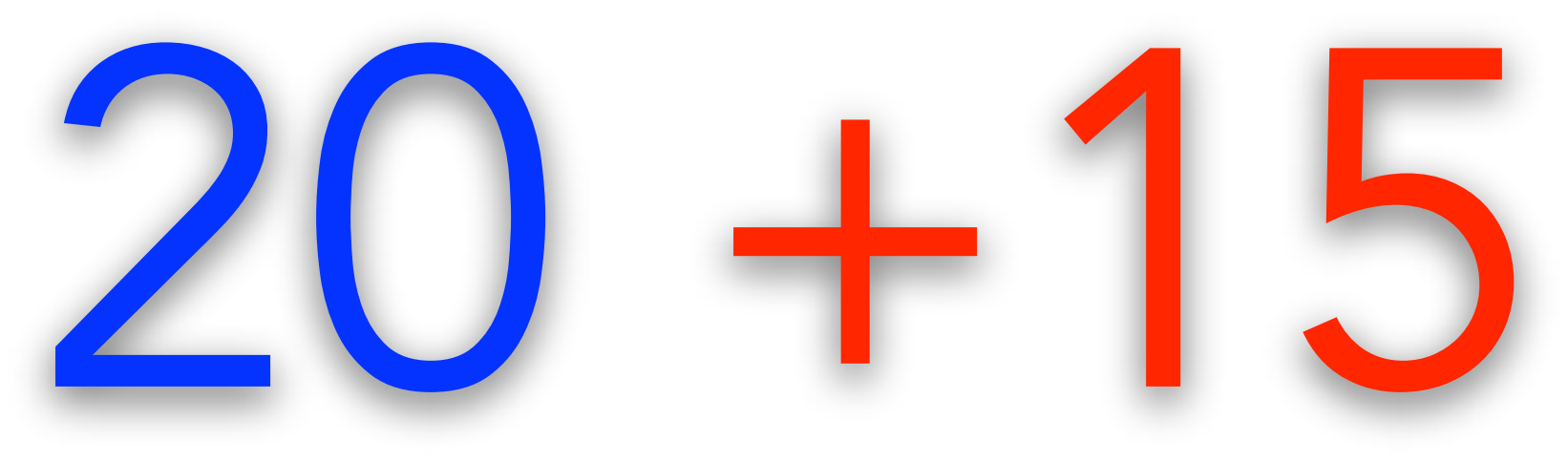

Q s = Q d

Calculating Equilibrium Price

$$-15 + 5P_e$$

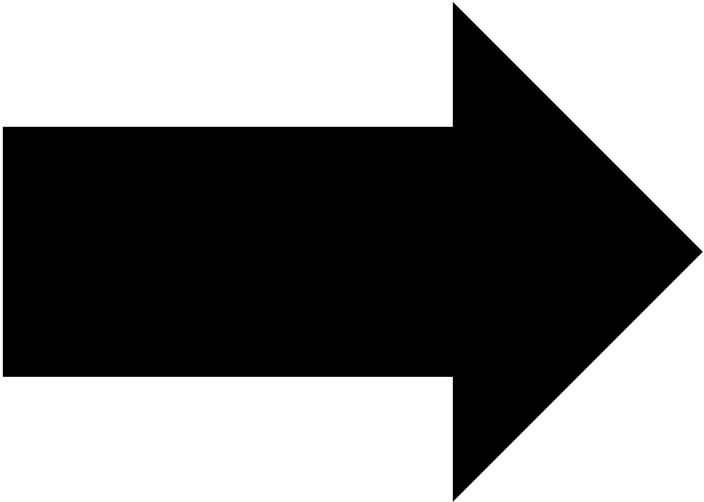
$$20 - 2P_e$$


5Pe + 2Pe


20 +15

$7P_e$

35



$$P_e = 35/7$$

$$P_e = 5$$

$$Q^S = -15 + 5P$$

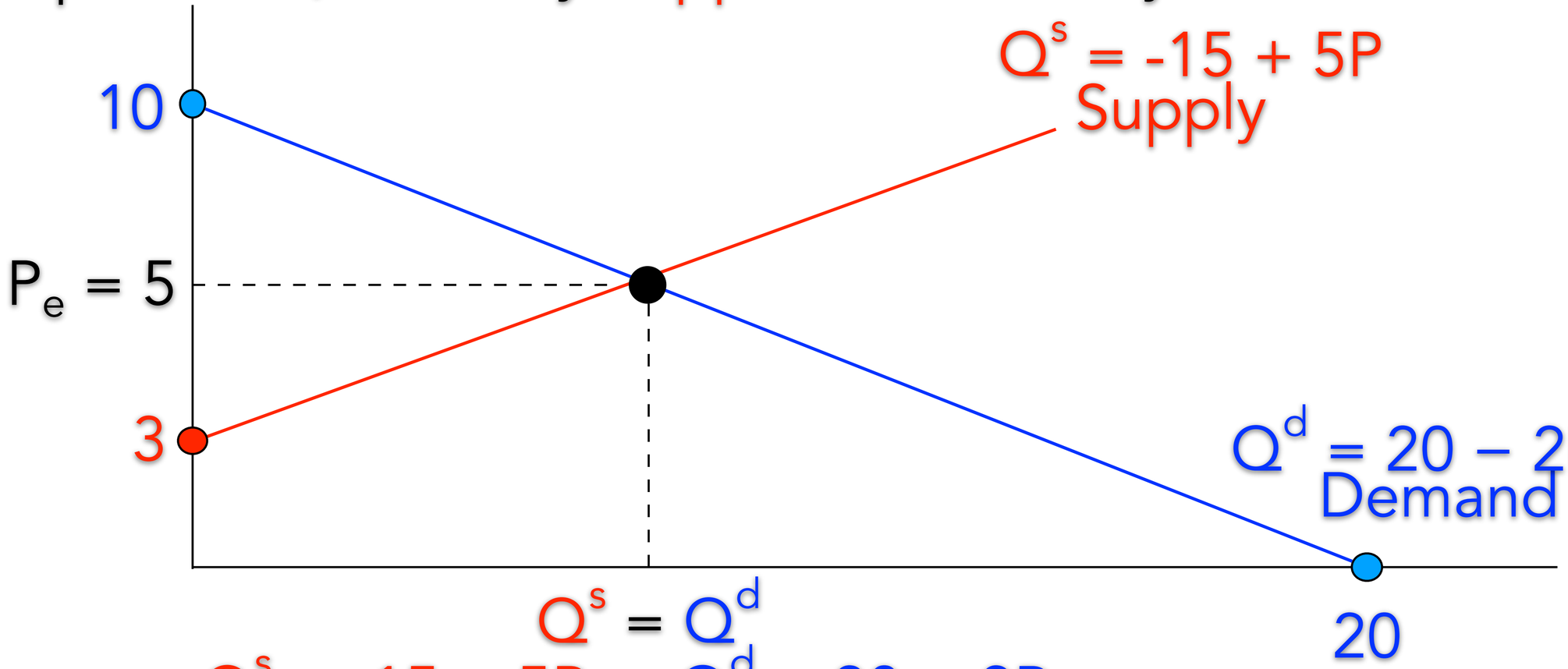
$$Q^d = 20 - 2P$$

At Equilibrium, Quantity Supplied = Quantity Demanded

Solve for Price:

$$P_e = 5$$

At Equilibrium, Quantity Supplied = Quantity Demanded

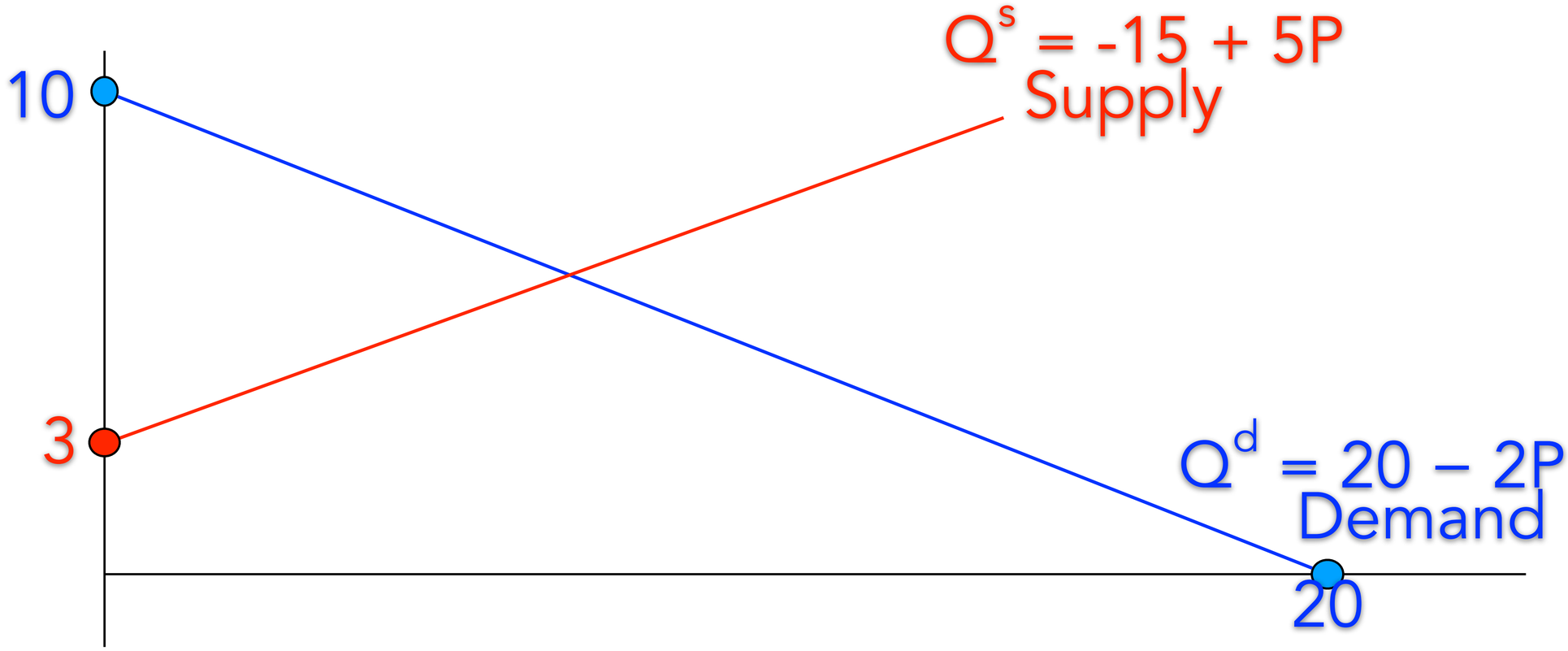


$$Q^s = -15 + 5P_e = Q^d = 20 - 2P_e$$

$$-15 + 5P_e = 20 - 2P_e$$

Solve for Price: $5P_e + 2P_e = 20 + 15$

$$7P_e = 35 \Rightarrow P_e = 35/7 \quad P_e = 5$$


$Q^s = -15 + 5P$
Supply
10
3
$Q^d = 20 - 2P$
Demand
20