$$Q = 1{,}000 - 200P$$

$$200P = 1{,}000 - Q$$

$$P = \frac{1{,}000}{200} - \frac{1}{200}Q$$

$$\boxed{P = 5 - 0.005Q}$$

$$Q = 1000 - 200P$$

$$0 = 1,000 - 200P$$

$$200P = 1,000$$

$$P = \frac{1,000}{200} \Rightarrow \boxed{P = 5}$$

$$Q = 1,100 - 200P$$

$$200P = 1,100 - Q$$

$$P = \frac{1,100}{200} - \frac{1}{200}Q$$

$$P = \underbrace{5.5} - \underbrace{0.005Q}$$

$$Q^D = 1{,}000 - 200P$$

$$P^* = 3$$

$$Q^* = 1{,}000 - 200(3)$$

$$Q^* = 1{,}000 - 600$$

$$\boxed{Q^* = 400}$$

$$50 - 0.5P = -25 + P$$

$$50 - 0.5P + 25 + 0.5P = -25$$

$$+P + 25 + 0.5P$$

$$75 = 1.5P \Rightarrow \boxed{P = 50}$$

$$Q^S = 200P - 200$$

$$P^* = 1.75$$

$$P^* = \frac{7}{4}$$

$$Q^* = 200\left(\frac{7}{4}\right) - 200$$

$$Q^* = 50(7) - 200 = 350 - 200$$

$$\boxed{Q^* = 150}$$

$$Q^S = 200P + 200 \qquad P^* = 2$$

$$Q^* = 200(2) + 200 = 400 + 200$$

$$\boxed{Q^* = 600}$$

$|E| < 1 \Rightarrow -1 < E < 1$

DEMAND

SUPPLY

$-1 < E < 0$ $0 < E < 1$

INELASTIC

$$Q = 360 - 2P$$

$$2P + Q = 360 - 2P + 2P$$

$$2P + Q - Q = 360 - Q$$

$$P = \frac{360}{2} - \frac{1}{2}Q = 180 - \frac{1}{2}Q$$

$$Q = 360 - 2(100) = 360 - 200$$

$$Q = 160$$

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$$Q^D = 152 - 20P \qquad P^* = 0.75$$

$$Q^* = 152 - 20(0.75) = 137$$