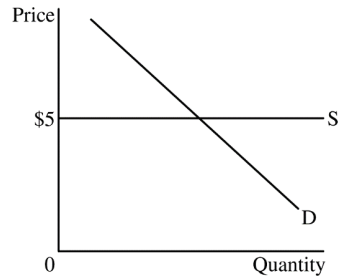


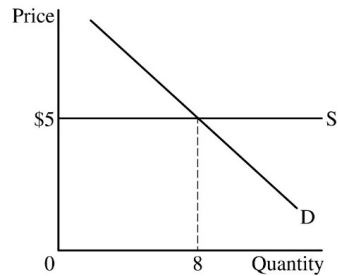
Question 3: Short

5 points

- (a) Draw a correctly labeled graph of the market with a downward-sloping demand (D) curve and a perfectly elastic supply (S) curve at a price of \$5. **1 point**



For the second point, the graph must show the equilibrium quantity as 8 units. **1 point**



Total for part (a) 2 points

- (b) (i) Calculate the magnitude of the price elasticity of demand as 1.25 and show your work. **1 point**

$$\begin{aligned} \text{Price Elasticity of Demand} &= \frac{\text{Percentage Change in Quantity Demanded}}{\text{Percentage Change in Price}} \\ &= \frac{\left| \left(\frac{4-8}{8} \right) \times 100 \right|}{\left| \left(\frac{7-5}{5} \right) \times 100 \right|} = \frac{50\%}{40\%} = 1.25 \end{aligned}$$

OR

$$= \frac{\left(\frac{4-8}{8} \right) \times 100}{\left(\frac{7-5}{5} \right) \times 100} = \frac{-50\%}{40\%} = -1.25$$

- (ii) State that demand is elastic. **1 point**

Total for part (b) 2 points

- (c) State no and explain that Emily's marginal benefit should be greater than or equal to the price she is willing to pay (\$7) for the second unit. **1 point**

Total for question 3 5 points