When 
$$\Delta p = p_2 - p_1 > 0$$
 Demand for Pixels 
$$Q_2(p_1, p_2) = \frac{1}{2} - \Delta p$$

$$\frac{1}{2} \qquad \frac{1}{2} + \Delta p \qquad 1$$
Demand for iPhones

 $Q_1(p_1, p_2) = \frac{1}{2} + \Delta p$