

1.

A) $c_1 = 900, c_2 = 1125$.

B) Saves 100

C) Saver, Must be better off.

2.

A) $p_1x_1 + p_2x_2 = 5(2) + 1(10)$

B) $x_1 = 3, x_2 = 5$

C) Seller

D) $p_1 = 10$

3.

A) $x_1 = \frac{m}{p_1+2p_2}$

B) $\frac{\partial\left(\frac{m}{p_1+2p_2}\right)}{\partial p_1} \frac{p_1}{\frac{m}{p_1+2p_2}} = -\frac{p_1}{p_1+2p_2}$

C) $-\frac{2}{2+2} = -\frac{1}{2}$ demand will decrease by about $\frac{1}{2}\%$.

D) 1

4.

A) Yes.

B) $\frac{200}{p_1}$

C) $\frac{\partial\left(\frac{200}{p_1}\right)}{\partial p_1} \frac{p_1}{\frac{200}{p_1}} = -1$

D) 0