

$$Q = 1,557,838 - 158,606P + 18.93A + 11,909RGP - 20.26Y - .019Pop$$

$$P = \$6$$

$$A = \$20,000$$

$$RGP = \$450$$

$$Y = 34,000$$

$$Pop = 5m$$

$$\begin{array}{r} 1,557,838 \\ - 951,636 \\ + 378,600 \\ + 53,590.5 \\ - 688,840 \\ - 95,000 \\ \hline 254,552 \end{array}$$

You may have gotten slightly different results due to rounding - that's okay -

$$E_P = \frac{\partial Q}{\partial P} \left(\frac{P}{Q} \right) = -158,606 \left(\frac{6}{254,552} \right) = -3.73$$

$$E_Y = \frac{\partial Q}{\partial Y} \left(\frac{Y}{Q} \right) = -20.26 \left(\frac{34,000}{254,552} \right) = -2.7$$

Inferior

$$E_{RGP} = \frac{\partial Q}{\partial RGP} \left(\frac{RGP}{Q} \right) = 11,909 \left(\frac{450}{254,552} \right) = .21$$

Substitute