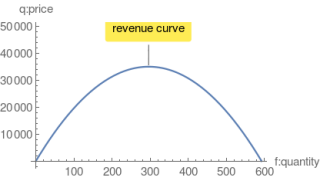


1.

1. (A) Basis for the Revenue model is a simple multiplication:

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{2}{5}f + 237\right) \times f = 237f - \frac{2f^2}{5}$$

Notice the latter is a quadratic:



(B) Domain starts at 0 USDollars revenue up to f-intercept coordinate equal to twice the value of vertex of the Parabola:

$$\frac{1185}{2}$$

(D) The maximum occurs at the vertex f-intercept coordinate:

$$\frac{1185}{4}$$

or the amount 35105.6 USDollars .