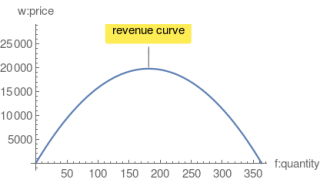


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{3}{5}f + 218\right) \times f = 218f - \frac{3f^2}{5}$$

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:

$$\frac{1090}{3}$$

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

$$\frac{545}{3}$$

or the amount 19801.7 USDollars .