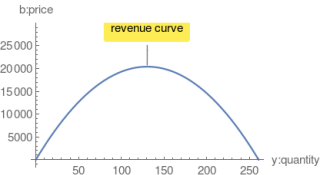


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{6}{5}y + 313\right) \times y = 313y - \frac{6y^2}{5}$$

Notice the latter is a quadratic:



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

$\frac{1565}{6}$

6

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

$\frac{1565}{12}$

12

or the amount 20410.2 USDollars .