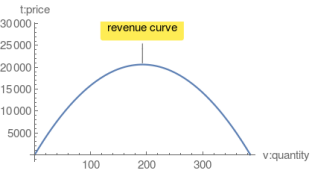


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{5}{9}v + 214\right) \times v = 214v - \frac{5v^2}{9}$$

Notice the latter is a quadratic:



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

$$\frac{1926}{5}$$

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

$$\frac{963}{5}$$

or the amount 20608.2 RussianRubles .