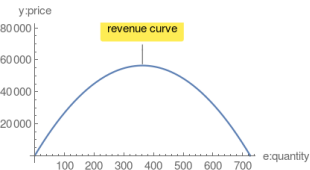


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{3}{7}e + 311\right) \times e = 311e - \frac{3e^2}{7}$$

Notice the latter is a quadratic:



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

$$\frac{2177}{3}$$

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

$$\frac{2177}{6}$$

or the amount 56420.6 RussianRubles .