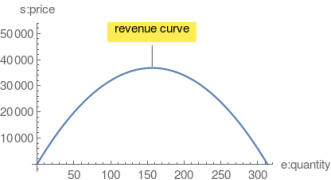


3.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{3}{2}e + 470\right) \times e = 470e - \frac{3e^2}{2}$$

Notice the latter is a quadratic:



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

$$\frac{940}{3}$$

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

$$\frac{470}{3}$$

or the amount 36816.7 Euros .