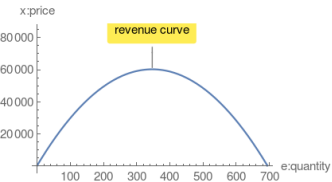


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{1}{2}e + 347\right) \times e = 347e - \frac{e^2}{2}$$

Notice the latter is a quadratic:



(b) Domain starts at 0 Euros revenue up to e-intercept coordinate equal to twice the value of vertex of the Parabola:  
694

(d) The maximum occurs at the vertex e-intercept coordinate:  
347

or the amount 60204.5 Euros .