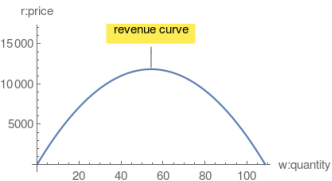


3.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = (-4w + 435) \times w = 435w - 4w^2$$

Notice the latter is a quadratic:



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

$$\frac{435}{4}$$

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

$$\frac{435}{8}$$

or the amount 11826.6 Euros .