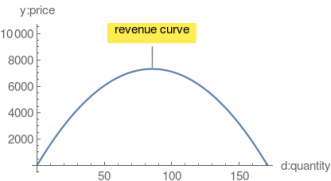


4.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = (-1d + 171) \times d = 171d - d^2$$

Notice the latter is a quadratic:



(b) Domain starts at 0 Euros revenue up to d-intercept coordinate equal to twice the value of vertex of the Parabola:
171

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

$$\frac{171}{2}$$

or the amount 7310.25 Euros .