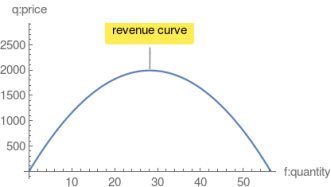


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{5}{2}f + 141\right) \times f = 141f - \frac{5f^2}{2}$$

Notice the latter is a quadratic:



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

$$\frac{282}{5}$$

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

$$\frac{141}{5}$$

or the amount 1988.1 Euros .