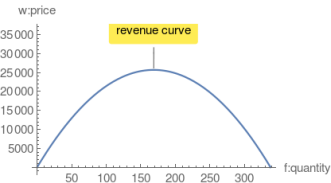


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{9}{10}f + 304\right) \times f = 304f - \frac{9f^2}{10}$$

Notice the latter is a quadratic:



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

$$\frac{3040}{9}$$

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

$$\frac{1520}{9}$$

or the amount 25671.1 Euros .