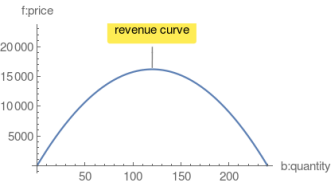


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{9}{8}b + 270\right) \times b = 270b - \frac{9b^2}{8}$$

Notice the latter is a quadratic:



(2) Domain starts at 0 Euros revenue up to b-intercept coordinate equal to twice the value of vertex of the Parabola:
240

(4) The maximum occurs at the vertex b-intercept coordinate:
120

or the amount 16200. Euros .