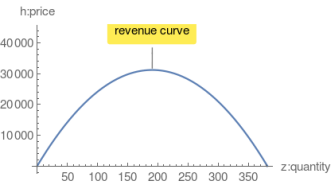


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{6}{7}z + 327\right) \times z = 327z - \frac{6z^2}{7}$$

Notice the latter is a quadratic:



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

$$\frac{763}{2}$$

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

$$\frac{763}{4}$$

or the amount 31187.6 Euros .