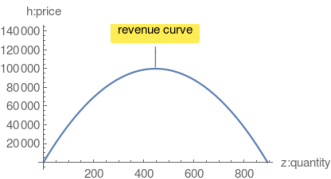


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{1}{2}z + 447\right) \times z = 447z - \frac{z^2}{2}$$

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:
894

(D) The maximum occurs at the vertex z-intercept coordinate:
447

or the amount 99904.5 Euros .