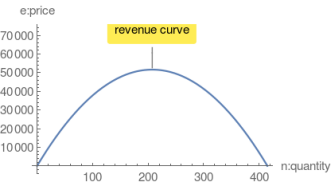


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{6}{5}n + 498\right) \times n = 498n - \frac{6n^2}{5}$$

Notice the latter is a quadratic:



(2) Domain starts at 0 Euros revenue up to n-intercept coordinate equal to twice the value of vertex of the Parabola:
415

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

$$\frac{415}{2}$$

or the amount 51667.5 Euros .