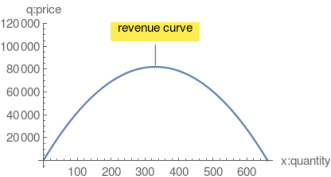


4.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{3}{4}x + 496\right) \times x = 496x - \frac{3x^2}{4}$$

Notice the latter is a quadratic:



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

$$\frac{1984}{3}$$

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

$$\frac{992}{3}$$

or the amount 82005.3 Euros .