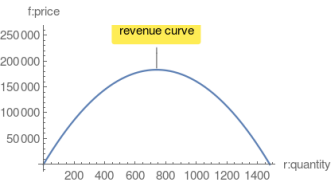


4.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{1}{3}r + 494\right) \times r = 494r - \frac{r^2}{3}$$

Notice the latter is a quadratic:



(B) Domain starts at 0 Euros revenue up to r-intercept coordinate equal to twice the value of vertex of the Parabola:
1482

(D) The maximum occurs at the vertex r-intercept coordinate:
741

or the amount 183027. Euros .