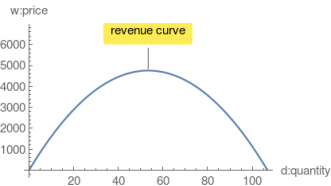


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{5}{3}d + 178\right) \times d = 178d - \frac{5d^2}{3}$$

Notice the latter is a quadratic:



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

$$\frac{534}{5}$$

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

$$\frac{267}{5}$$

or the amount 4752.6 Euros .