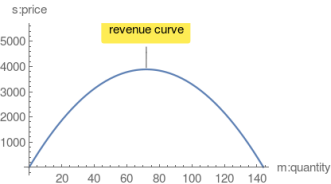


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{3}{4}m + 108\right) \times m = 108m - \frac{3m^2}{4}$$

Notice the latter is a quadratic:



(b) Domain starts at 0 Euros revenue up to m-intercept coordinate equal to twice the value of vertex of the Parabola:
144

(d) The maximum occurs at the vertex m-intercept coordinate:
72

or the amount 3888. Euros .