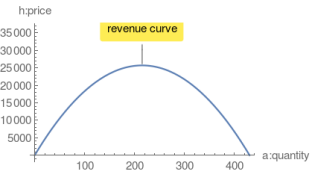


2.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{5}{9}a + 239\right) \times a = 239a - \frac{5a^2}{9}$$

Notice the latter is a quadratic:



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

$$\frac{2151}{5}$$

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

$$\frac{2151}{10}$$

or the amount 25704.5 BritishPounds .