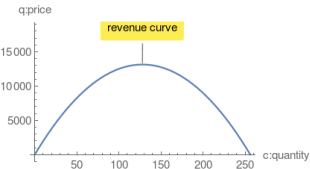


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{4}{5}c + 205\right) \times c = 205c - \frac{4c^2}{5}$$

Notice the latter is a quadratic:



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

$$\frac{1025}{4}$$

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

$$\frac{1025}{8}$$

or the amount 13132.8 BritishPounds .