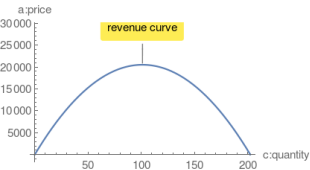


4.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = (-2c + 405) \times c = 405c - 2c^2$$

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:

$$\frac{405}{2}$$

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

$$\frac{405}{4}$$

or the amount 20503.1 BritishPounds .