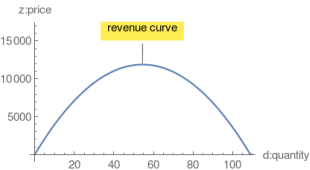


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = (-4d + 436) \times d = 436d - 4d^2$$

Notice the latter is a quadratic:



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

109

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

$$\frac{109}{2}$$

or the amount 11881. BritishPounds .