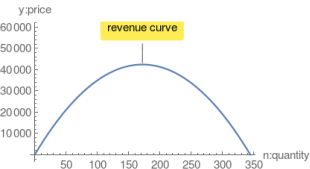


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{10}{7}n + 492\right) \times n = 492n - \frac{10n^2}{7}$$

Notice the latter is a quadratic:



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

$$\frac{1722}{5}$$

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

$$\frac{861}{5}$$

or the amount 42361.2 BritishPounds .