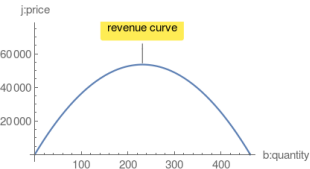


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = (-1b + 463) \times b = 463b - b^2$$

Notice the latter is a quadratic:



(b) Domain starts at 0 BritishPounds revenue up to b-intercept coordinate equal to twice the value of vertex of the Parabola:
463

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

$$\frac{463}{2}$$

or the amount 53592.3 BritishPounds .