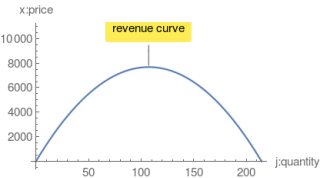


3.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{2}{3}j + 143\right) \times j = 143j - \frac{2j^2}{3}$$

Notice the latter is a quadratic:



(B) Domain starts at 0 USDollars revenue up to j-intercept coordinate equal to twice the value of vertex of the Parabola:

$$\frac{429}{2}$$

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

$$\frac{429}{4}$$

or the amount 7668.37 USDollars .