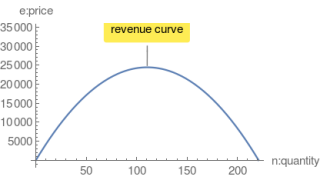


3.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = (-2n + 442) \times n = 442n - 2n^2$$

Notice the latter is a quadratic:



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

221

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

$\frac{221}{2}$

or the amount 24420.5 USDollars .