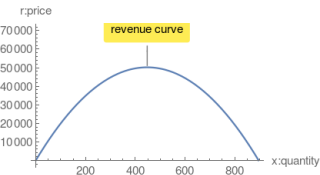


2.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{1}{4}x + 224\right) \times x = 224x - \frac{x^2}{4}$$

Notice the latter is a quadratic:



(2) Domain starts at 0 USDollars revenue up to x-intercept coordinate equal to twice the value of vertex of the Parabola:
896

(4) The maximum occurs at the vertex x-intercept coordinate:
448

or the amount 50176. USDollars .