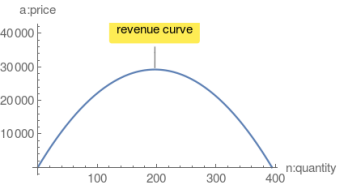


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{3}{4}n + 296\right) \times n = 296n - \frac{3n^2}{4}$$

Notice the latter is a quadratic:



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

$$\frac{1184}{3}$$

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

$$\frac{592}{3}$$

or the amount 29205.3 Yen .