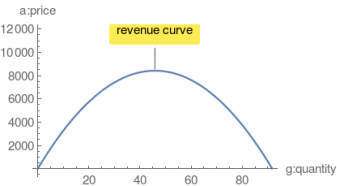


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = (-4g + 367) \times g = 367g - 4g^2$$

Notice the latter is a quadratic:



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

$$\frac{367}{4}$$

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

$$\frac{367}{8}$$

or the amount 8418.06 Yen .