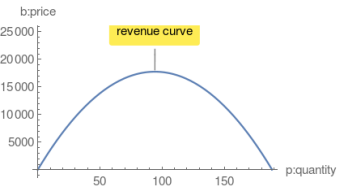


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = (-2p + 377) \times p = 377p - 2p^2$$

Notice the latter is a quadratic:



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

$$\frac{377}{2}$$

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

$$\frac{377}{4}$$

or the amount 17766.1 Yen .