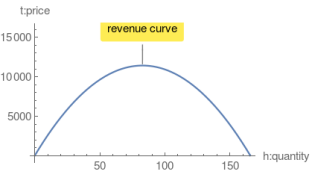


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{5}{3}h + 276\right) \times h = 276h - \frac{5h^2}{3}$$

Notice the latter is a quadratic:



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

$$\frac{828}{5}$$

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

$$\frac{414}{5}$$

or the amount 11426.4 RussianRubles .