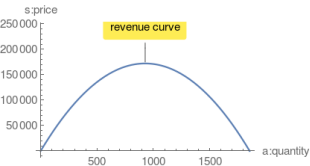


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{1}{5}a + 371\right) \times a = 371a - \frac{a^2}{5}$$

Notice the latter is a quadratic:



(B) Domain starts at 0 RussianRubles revenue up to a-intercept coordinate equal to twice the value of vertex of the Parabola:
1855

(D) The maximum occurs at the vertex a-intercept coordinate:

$$\frac{1855}{2}$$

or the amount 172051. RussianRubles .