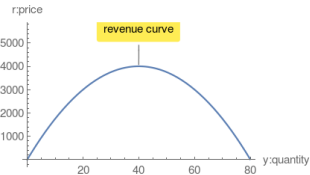


4.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{5}{2}y + 200\right) \times y = 200y - \frac{5y^2}{2}$$

Notice the latter is a quadratic:



(2) Domain starts at 0 RussianRubles revenue up to y-intercept coordinate equal to twice the value of vertex of the Parabola:
80

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

40

or the amount 4000. RussianRubles .