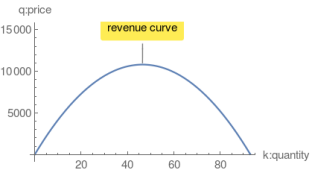


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = (-5k + 465) \times k = 465k - 5k^2$$

Notice the latter is a quadratic:



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

93

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

$\frac{93}{2}$

2

or the amount 10811.3 RussianRubles .