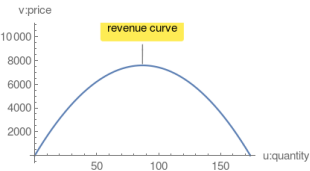


4.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = (-1u + 174) \times u = 174u - u^2$$

Notice the latter is a quadratic:



(2) Domain starts at 0 RussianRubles revenue up to u-intercept coordinate equal to twice the value of vertex of the Parabola:  
174

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

87

or the amount 7569. RussianRubles .