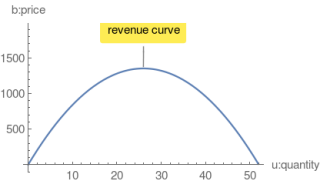


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = (-2u + 104) \times u = 104u - 2u^2$$

Notice the latter is a quadratic:



(b) Domain starts at 0 USDollars revenue up to u-intercept coordinate equal to twice the value of vertex of the Parabola:
52

(d) The maximum occurs at the vertex u-intercept coordinate:
26

or the amount 1352. USDollars .