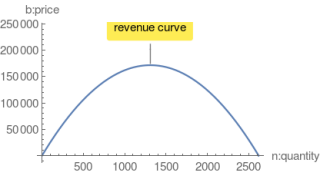


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{1}{10}n + 262\right) \times n = 262n - \frac{n^2}{10}$$

Notice the latter is a quadratic:



(2) Domain starts at 0 USDollars revenue up to n-intercept coordinate equal to twice the value of vertex of the Parabola:  
2620

(4) The maximum occurs at the vertex n-intercept coordinate:  
1310

or the amount 171610. USDollars .