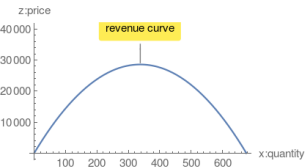


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{1}{4}x + 169\right) \times x = 169x - \frac{x^2}{4}$$

Notice the latter is a quadratic:



(B) Domain starts at 0 CanadianDollars revenue up to x-intercept coordinate equal to twice the value of vertex of the Parabola:
676

(D) The maximum occurs at the vertex x-intercept coordinate:
338

or the amount 28561. CanadianDollars .