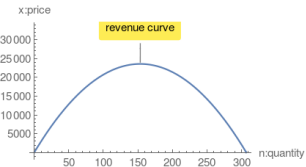


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = (-1n + 307) \times n = 307n - n^2$$

Notice the latter is a quadratic:



(b) Domain starts at 0 CanadianDollars revenue up to n-intercept coordinate equal to twice the value of vertex of the Parabola:
307

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

$$\frac{307}{2}$$

or the amount 23562.3 CanadianDollars .