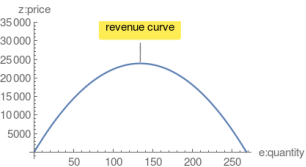


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{4}{3}e + 357\right) \times e = 357e - \frac{4e^2}{3}$$

Notice the latter is a quadratic:



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

$$\frac{1071}{4}$$

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

$$\frac{1071}{8}$$

or the amount 23896.7 CanadianDollars .