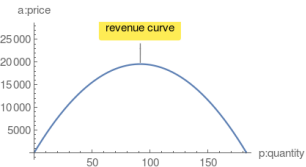


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{7}{3}p + 427\right) \times p = 427p - \frac{7p^2}{3}$$

Notice the latter is a quadratic:



(2) Domain starts at 0 CanadianDollars revenue up to p-intercept coordinate equal to twice the value of vertex of the Parabola:
183

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

$$\frac{183}{2}$$

or the amount 19535.3 CanadianDollars .