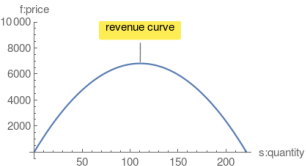


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{5}{9}s + 123\right) \times s = 123s - \frac{5s^2}{9}$$

Notice the latter is a quadratic:



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

$$\frac{1107}{5}$$

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

$$\frac{1107}{10}$$

or the amount 6808.05 CanadianDollars .