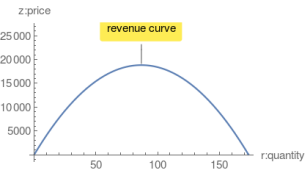


2.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{5}{2}r + 434\right) \times r = 434r - \frac{5r^2}{2}$$

Notice the latter is a quadratic:



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

$$\frac{868}{5}$$

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

$$\frac{434}{5}$$

or the amount 18835.6 CanadianDollars .