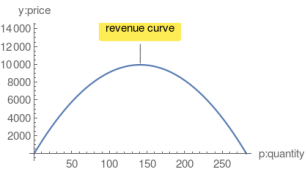


3.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{1}{2}p + 141\right) \times p = 141p - \frac{p^2}{2}$$

Notice the latter is a quadratic:



(b) Domain starts at 0 CanadianDollars revenue up to p-intercept coordinate equal to twice the value of vertex of the Parabola:  
282

(d) The maximum occurs at the vertex p-intercept coordinate:  
141

or the amount 9940.5 CanadianDollars .