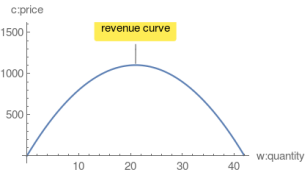


3.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = \left(-\frac{5}{2}w + 105\right) \times w = 105w - \frac{5w^2}{2}$$

Notice the latter is a quadratic:



(2) Domain starts at 0 CanadianDollars revenue up to w-intercept coordinate equal to twice the value of vertex of the Parabola:
42

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

21

or the amount 1102.5 CanadianDollars .