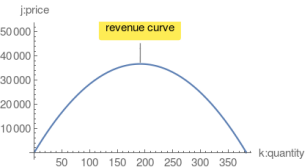


2.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = (-1k + 383) \times k = 383k - k^2$$

Notice the latter is a quadratic:



(2) Domain starts at 0 CanadianDollars revenue up to k-intercept coordinate equal to twice the value of vertex of the Parabola:
383

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

$$\frac{383}{2}$$

or the amount 36672.3 CanadianDollars .