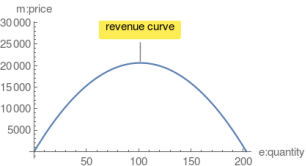


1.

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

$$\text{Revenue} = \text{Price} \times \text{Quantity} = (-2e + 406) \times e = 406e - 2e^2$$

Notice the latter is a quadratic:



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

203

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

$\frac{203}{2}$

or the amount 20604.5 CanadianDollars .