4.

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

Revenue = Price×Quantity = $(-\frac{1}{5}w+329)$ × w = $329\,w-\frac{w^2}{5}$

Notice the latter is a quadratic:
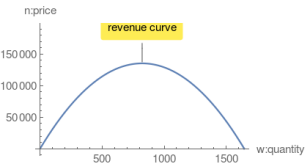
(2) Domain starts at 0 CanadianDollars revenue up to w-intercept coordinate equal to twice the value of vertex of the Parabola: 1645

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

$\frac{1645}{2}$

or the amount 135301. CanadianDollars .