2.

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

Revenue = Price×Quantity = $(-\frac{1}{6}f+278) \times f = 278\,f - \frac{f^2}{6}$

Notice the latter is a quadratic:
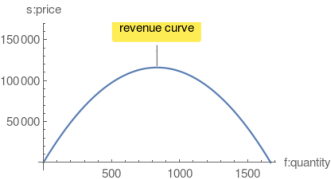
(2) Domain starts at 0 Euros revenue up to f-intercept coordinate equal to twice the value of vertex of the Parabola: 1668

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

834

or the amount 115 926. Euros .