## 3.

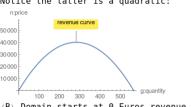3. (A) Basis for the Revenue model is a simple multiplication:

Revenue = Price×Quantity = $(-\frac{1}{2}g+283) \times g = 283g - \frac{g^2}{2}$

Notice the latter is a quadratic:



(B) Domain starts at 0 Euros revenue up to g-intercept coordinate equal to twice the value of vertex of the Parabola:
566

(D) The maximum occurs at the vertex g-intercept coordinate:
283
or the amount 40 044.5 Euros .