Notice the latter is a quadratic: revenue curve

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

Revenue = Price×Quantity =  $\left(-\frac{5}{2}a+180\right) \times a = 180 a - \frac{5a^2}{2}$ 

(D) The maximum occurs at the vertex a-intercept coordinate:

or the amount 3240. RussianRubles .