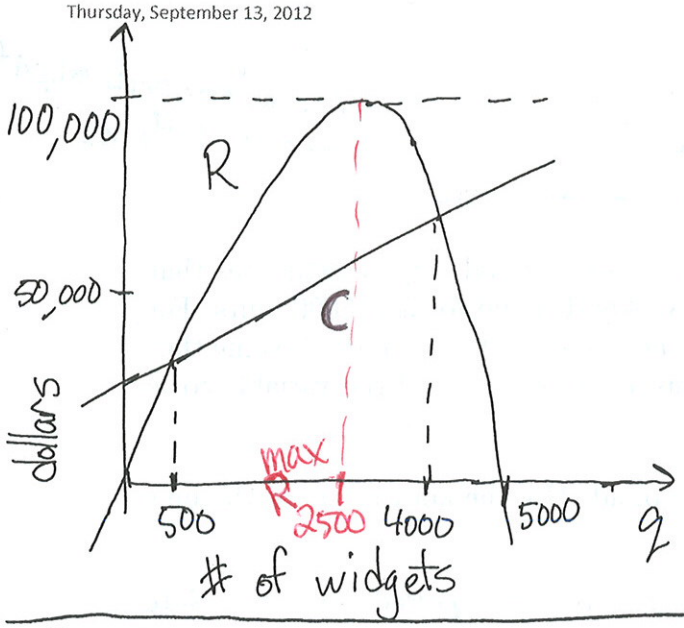
R, C, P mini-review

Thursday, September 13, 2012

solutions + Clicker Qs.



* Assume linear demand!

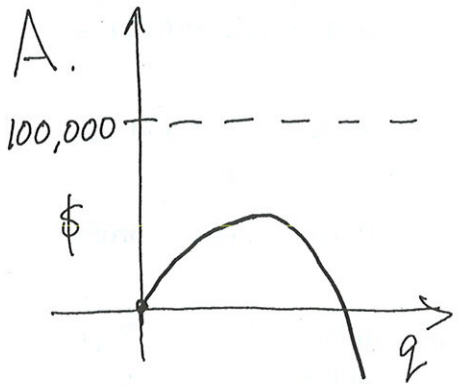
① Maximum revenue is $100,000 when q = 2500

② Fixed costs are about $25,000

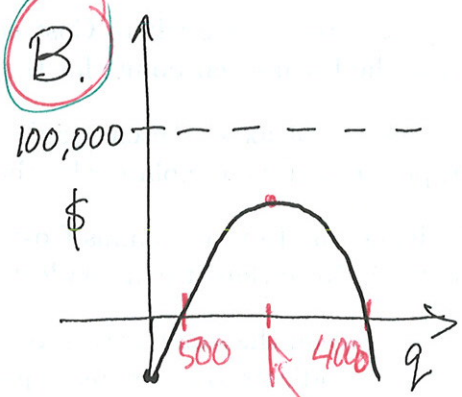
③ Variable costs are given by slope of C(q). with units: dollars per widget

CQ ④ For the revenue and cost functions graphed above, what does the graph of profit, P(q), look like?

A.

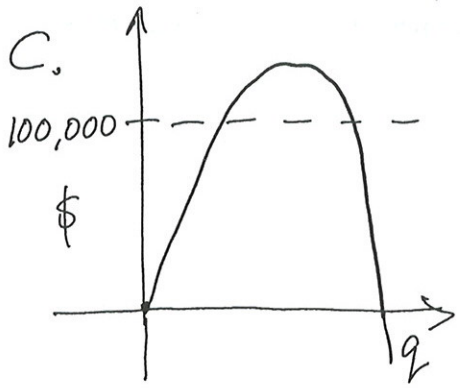


B.

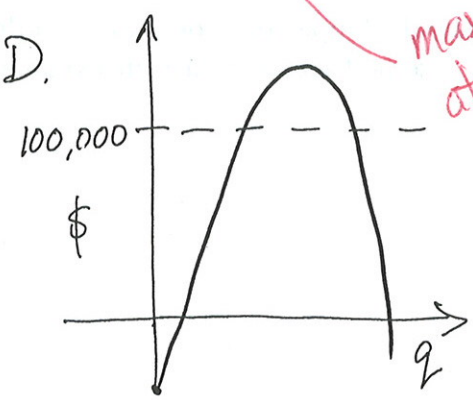


max profit at $\frac{(4000-500)}{2}+500$ = 2250 widgets.

C.



D.



E. I am completely lost.

⑤ Indicate the break-even values (including the numbers) on the q-axis.

due to variable costs, max profit occurs at lower q than max revenue.

⑥ ~~Total~~ For what value of q is the profit at a maximum?

less than. B. 2500 C. more than 2500 A. less than 2500 D. Not enough info E. lost.