

13. Correct. The answer is false. $P = 70 - 5Q = MC = 57 - 4Q \Rightarrow Q = 13$. $P = 70 - 5 \cdot 13 = 5$ and profits = $5 \cdot 13 - (10 + 57 \cdot 13 - 2 \cdot 13^2) = -\348 . The social optimum is where price equals marginal cost or where demand crosses marginal cost. However, with decreasing costs marginal cost is below average costs and the producer would make a loss as in this case.