Problem Set # 4

1) A monopoly's inverse demand function is $p = 100 - Q + (5A - A^2)/Q$, where Q is its quantity, p is its price, and A is the level of advertising. Its marginal cost of production is constant at 10, and its cost of a unit of advertising is 1. What are the firm's profit-maximizing price, quantity, and level of advertising?

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1) In a sealed-bid, second-price auction, you should bid

A) your estimate of what others value the good at.

B) one dollar more than your estimate of what the second-highest bid will be.

C) your highest value.

D) the common value of the good.

2) The winner's curse occurs when

A) bidders "shade" their bids.

B) the winning bid is higher than the good's common value.

C) the winner buys something he didn't need.

D) the winning bid is higher than the private value of the good.

3) The individual with the highest valuation of the good will win in which of the following auctions?

A) English Auction

B) Dutch Auction

C) Sealed Bid Auction

D) All of the above.

4) "In Dutch or first-price sealed-bid auctions, participants will bid less than their highest valuation". Is this statement true or false? Explain why.

5) Which of the following average cost functions suggests the presence of a natural monopoly?

A) AC = 2

B) AC = 100/Q + 2

C) TC = 100/Q + 2Q

D) All of the above.

6) Which of the following products benefits from network externalities?

A) cable TV service

B) fashion clothing

C) Twitter

D) high-speed trains