Use the following to answer questions (1) and (2):

Albert and Victoria are roommates. Each of them prefers a clean room to a dirty room, but neither likes housecleaning. If both clean the room, they each get a payoff of 5 (perhaps this refers to their satisfaction or utility). If one cleans and the other doesn’t clean, the person who does the cleaning gets a payoff of 2, and the person who doesn’t clean gets a payoff of 6. If neither cleans, the room stays a mess and each gets a payoff of 3. If each decides whether or not to clean at the same time, the payoff matrix is given below:

<table>
<thead>
<tr>
<th></th>
<th>Clean</th>
<th>Don’t Clean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean</td>
<td>5, 5</td>
<td>6, 2</td>
</tr>
<tr>
<td>Don’t Clean</td>
<td>2, 6</td>
<td>3, 3</td>
</tr>
</tbody>
</table>

Note: Victoria’s payoffs are listed first, while Albert’s payoffs are listed second.

[1] For both players, choosing not to clean is a strictly dominant strategy.

A. True  
B. False


A. True  
B. False

[3] A monopolist facing a demand equal to: \( Q = 1000 - 2P \) (where \( Q \) is quantity demanded and \( P \) is price), coupled with a total cost equal to: \( TC = 200Q \) (where \( TC \) is short run total cost), should sell at a price of ____ to maximize profit in the short run.

A. 200  
B. 400  
C. 350  
D. None of the above

[4] A monopolist is currently selling its product at a price which is 4 times its marginal cost. Accordingly, provided the firm is maximizing profit, the current price elasticity of demand is:

A. -4  
B. -3  
C. -4/3  
D. -3/4

[5] A ____ game is one in which players move simultaneously.

A. static  
B. dynamic
[6] Consider the following game, whereby player 1 moves first, selecting either L or R. After player 1 moves, player 2 then moves, choosing either l or r. The game tree is depicted below:

Note: The players payoffs are listed at the bottom of the tree, with player 1’s payoffs listed first and player 2’s payoffs listed second. Utilizing backwards induction, the likely outcome is that:

A. player 1 moves L and then player 2 moves l.
B. player 1 moves L and then player 2 moves r.
C. player 1 moves R and then player 2 moves l.
D. player 1 moves R and then player 2 moves r.

Use the following to answer questions (7) and (8): Two firms, A and B, must decide how much money to invest in research and development (in thousands of dollars). The following payoff matrix illustrates their choices (with A’s payoffs listed first and B’s payoffs listed second):

```
   A     B
   100   200   300   400
100:  10,3   0,4   5,0   3,2
200:  5,0    12,5  0,0   0,4
300:  3,0    0,3   5,12  4,0
```

Note: Payoffs are in millions of dollars. Also, the two firms move simultaneously and have complete information.

[7] The strictly dominant strategy for firm A:
A. is to invest $100 thousand in research and development.
B. is to invest $200 thousand in research and development.
C. is to invest $300 thousand in research and development.
D. does not exist.

[8] If both players select $200 thousand as the research and development investment, this will coincide with a Nash Equilibrium.

A. True
B. False

[9] Suppose a monopolist faces the following market demand: Q = 120 - 3P, where Q is the quantity sold and P is the price charged. At Q = 30, marginal revenue equals:

A. $40
B. $30
C. $20
D. $0

[10] Which of the following are U.S. antitrust laws?
A. Clayton Act
B. Yakety Act
C. Liebenstein Act
D. All of the above