Assignment 5

The cut-off date for submitting this assignment has passed.

1. Consider the following matrix where player 1 is the row player and player 2 is the column player:

```
      a   b   c   d
    +-------+-------+-------+-------+
  a |  3    |  1    |  4    |  2    |
  b |  2    |  1    |  3    |  1    |
  c |  4    |  3    |  2    |  1    |
  d |  1    |  2    |  1    |  3    |
```

What is the following a dominant strategy for player 1?

- a
- b
- c
- d

(0 points)

2. The value of the following game is:

```
    +-------+-------+-------+-------+
  a |  1    |  2    |  3    |  4    |
  b |  2    |  3    |  4    |  5    |
  c |  3    |  4    |  5    |  6    |
  d |  4    |  5    |  6    |  7    |
```

(0 points)

3. The payoff matrix of the following game is:

```
    +-------+-------+-------+-------+
  a |  1    |  2    |  3    |  4    |
  b |  2    |  3    |  4    |  5    |
  c |  3    |  4    |  5    |  6    |
  d |  4    |  5    |  6    |  7    |
```

(0 points)

4. If player 1 uses the mixed strategy, the expected payoffs for the players are (row player) and (column player) respectively. In equilibrium, they then choose the Nash Equilibrium.

(0 points)

5. Write down the dominated strictly dominated strategies, order of entering class section, or True / False?

- True
- False

6. State whether the following statement is true or false.

- A strictly dominated strategy can never be a best response.

(1 point)

7. State whether the following statement is true or false.

- If player 1 has a Nash equilibrium of a symmetric, two-player game then it is evolutionary stable.

(1 point)

8. State whether the following statement is true or false.

- Nash equilibrium requires that the rationality of the common players be common knowledge so that the players choose their strategies in such a way to choose.

(1 point)

9. State whether the following statement is true or false.

- A Nash equilibrium may have player 2 favor a different strategy than player 1.

(1 point)

10. State whether the following statement is true or false.

- A Nash equilibrium must be a dominated strategy in a sequential moves game.

(1 point)