

Correct answers are in **bold**.

1. Find the dominant strategy of players A and B in the following game:

| | | Player B | |
|----------|-----------|-----------|----------|
| | | Cooperate | Defect |
| Player A | Cooperate | [5, 15] | [4, 19] |
| | Defect | [3, 3] | [3, 15] |

2. Find the Nash Equilibrium of players A and B in the following game:

| | | Player B | |
|----------|-----------|-------------------------|----------|
| | | Cooperate | Defect |
| Player A | Cooperate | [7 , 9] | [6, 8] |
| | Defect | [3, 12] | [19, 4] |

3. Find the Nash Equilibrium of players A and B in the following game:

| | | Player B | | |
|----------|--------|----------|---------------------------|----------|
| | | Low | Medium | High |
| Player A | Low | [7, 12] | [6, 14] | [18, 2] |
| | Medium | [6, 12] | [10 , 15] | [16, 9] |
| | High | [5, 17] | [4, 22] | [8, 8] |

4. In wireless telecommunications, two cellular licenses were given out simultaneously to reduce the effect of a first mover advantage. Fill in the following 2X2 game which can describe why there are oscillations in the market (i.e. there is no Nash equilibrium).

| | | Incumbents | |
|----------|--------------|-------------------------|-------------------------|
| | | Fixed Fee | Usage Charge |
| Entrants | Fixed Fee | [1 , 0] | [0 , 1] |
| | Usage Charge | [0 , 1] | [1 , 0] |

NOTE: This is only one of many possible solutions.