

1. Which statement best describes a repeated game?

- ☐ A repeated game is a strategic interaction in which players' payoffs depend only on their final actions, regardless of the game's duration or history.
- ☐ A repeated game is a one-shot game where players make simultaneous decisions without any knowledge of past interactions or future consequences.
- ☐ A repeated game is a strategic interaction where the same stage game is played multiple times, allowing players to condition their actions on past outcomes.
- ☐ A repeated game is a game played over a single round but involves multiple players making sequential decisions.

2. Which statement best describes a strategy in a repeated game?

- ☐ A strategy in a repeated game is a complete plan of action specifying a player's moves in each stage of the game, based on the history of previous actions by all players.
- ☐ A strategy in a repeated game is a set of random actions chosen independently at each stage without considering past interactions.
- ☐ A strategy in a repeated game is a plan that only determines a player's actions in the first stage of the game, leaving future stages unspecified.
- ☐ A strategy in a repeated game is the choice of a single action to be repeated in every stage, regardless of the opponent's behavior.

3. Consider the follow stage game:

$$A = \begin{pmatrix} 12 & -3 \\ -3 & 12 \end{pmatrix} \quad B = -A$$

What are the utilities to both players when the game is repeated 3 times with the following strategies:

- For the row player: play row 1 first. If the column player played the first column, play row 1 for the next two turns if not: play row 1 followed by row 2.
 - For the column player: play column 1 first then play the action that would be a best response to the last action picked by the row player.
- ☐ Utility to row player: -6 , utility to column player: 6 .
 - ☐ Utility to row player: -12 , utility to column player: -12 .
 - ☐ Utility to row player: 6 , utility to column player: -6 .
 - ☐ Utility to row player: 0 , utility to column player: 0 .