

Your full name:

Instructions

- The exam consists of 18 statements, of which some are true (correct) and some are false (wrong). We don't specify how many are true or false.
- The 18 statements are divided into groups, where each group has some background information that is common to all the statements in the group.
- Your exam score is calculated as follows. Correct answers (i.e, true statements marked as true, and false statements marked as false) are awarded 1 point. Wrong answers (i.e., true statements marked as false, and false statements marked as true) give 1 point deduction. Statements that you do not mark never give any points, positive or negative.
- The maximum score is +18 and the minimum is -18. You must be awarded at least +6 points to pass the exam. Your exam score contributes directly to your total course score that is used to calculate your grade on the course (i.e., the exam contributes at most 18 points to your course score).
- You may only use a pen or pencil and an eraser. Specifically, no electronic equipment, no books, and no notes are allowed.
- Feel free to make notes or calculations on the form or on the provided extra paper.

The form will be read by a machine. Please mark clearly with a pen or pencil.

Check:



Uncheck to correct:



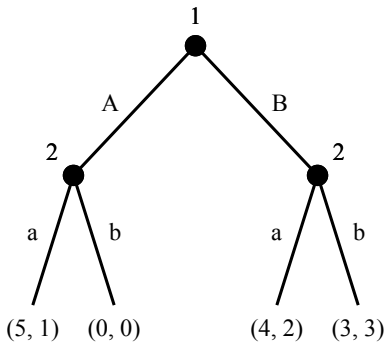
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1

Consider the two-player game depicted below.



- 1.1 Player 1 has exactly 2 pure strategies.
 True False
- 1.2 Player 2 has exactly 2 pure strategies.
 True False
- 1.3 The game has exactly 8 pure strategy profiles.
 True False
- 1.4 The game has exactly two pure-strategy Nash equilibria.
 True False
- 1.5 The game has exactly two subgame perfect Nash equilibria.
 True False
- 1.6 The game has exactly one subgame perfect Nash equilibrium.
 True False
- 1.7 All pure-strategy Nash equilibria in this game are Pareto optimal.
 True False
- 1.8 For player 1, the pure strategy A strictly dominates the pure strategy B.
 True False



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Consider the infinitely repeated game with average payoffs where the stage game (one-round game) is the game in Question 1 above.

2.1 There is a strategy profile for the repeated game that has average payoff profile (3, 3) and is a Nash equilibrium.

True False

2.2 There is a strategy profile for the repeated game that has average payoff profile (4, 2) and is a Nash equilibrium.

True False

2.3 There is a strategy profile for the repeated game that has average payoff profile (5, 1) and is a Nash equilibrium.

True False



Consider a two-player simultaneous action game, where player I has actions A , B , and C , and player II has actions d , e , and f . The payoffs are given by

	d	e	f
A	(2, 10)	(2, 12)	(8, 14)
B	(3, 0)	(5, 5)	(2, 2)
C	(1, 7)	(3, 9)	(3, 3)

3.1 All Nash equilibria in this game are Pareto optimal.

True False

3.2 This game has two pure strategy Nash equilibria and at least one mixed strategy equilibrium.

True False

3.3 This game has more than one mixed strategy equilibrium.

True False

3.4 The pure strategy where player II always plays d is strictly dominated.

True False

3.5 The pure strategy where player I always plays C is strictly dominated.

True False

3.6 This is a game of imperfect information.

True False

3.7 The game has exactly 9 strategy profiles.

True False

