

# [Questions 1-5 games people play](https://assignbuster.com/questions-1-5-games-people-play/)

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Answers to Questions 5 Games People Play The four elements of a game (with respect to game theory) are: the players; the rules of the game; thealternatives (or outcomes) of the game; and the players’ preferences on the outcomes of the game (Maoz 30). In the movie “ The Princess Bride”, Vizzini and the masked man are put into a situation that deals with a lot of decision-making, especially when the results could mean life or death. In this game, the players are the masked man and Vizzini, the rules of the game is to choose which cup of wine contains the poison, the possible outcomes of the game is the death of either the masked man or Vizzini, and the preference is the death of the player that loses. The dilemma for both players is to choose correctly which wine goblet is safe to drink, and which has the poison. Vizzini lost the game when he drank the wine with poison, and the game ended with the masked man as the victor. 2. What a person chooses to do in terms of decision-making and strategy can be explained by the common knowledge of rationality, or CKR. By exploring all possibilities and expectations on what others will do, as well as what might happen in certain if-then scenarios, effective strategies can be made given the possibility that the people a person plays with are also rational (Heap 23). For example, in reviewing for exams, strategies can be applied in such a way that the method can be more efficient and there would be a higher retention as compared to non-strategic reviewing. In my case, I just make an outline of the chapter to be studied, and then list all pertinent terms as well as their definitions. Afterwards I try to make a paraphrased version of the whole concept of the chapter, only studying extensively when needed to. This allows more time to focus on the concepts and framework of the chapter, rather than just rote-reading the whole chapter. Another simple strategy that needs to weigh in the possible outcomes is during a small game of cards. In games that entail the players to pit the suit and numbers in their cards, possibilities are usually run in the minds of each player. My usual strategy for this to prevent landing in last place is to recall as much as possible which cards were already discarded, then check my own hand and rule out the possibilities of the remaining cards. 3. The Nash equilibrium’s basic idea is that in a game, players would tend not to change their chosen strategies if the preferences of the other players as well as their strategies were already given out at the beginning (Heap 41). In the given situation, wherein the policeman threatens the petty crook of being punished severely and in turn makes her confess to her crime shows an example of a Nash equilibrium, provided that the policeman follows-through on what he said. In a subgame perfect equilibrium however, the movements of all the players are sequential, and that the last player’s move (leader) would dictate the actions of the next player (follower) in the game (Osborne 97). If the crook would choose not to confess, the policeman would have a harder time since he should be following-through with his threat, and that in order to obtain the harshest punishment for the crook, more than sufficient evidence must be produced. If not, the petty crook would not get punished as heavily as the policeman threatened her, making the whole thing a bluff. 4. The prisoners’ dilemma is an example of an inefficient Nash equilibrium, wherein the outcomes for all players only go from bad to worse (Myerson 97). The dilemma for two criminals involved in two crimes is that one would get sentenced for a minor crime without confession, and that one would get sentenced in a major crime if the other confessed. If one confesses, he would go free and the other one would remain behind bars for six years. If both confess, they would serve time for five years. But if none of them confesses, both can get out of jail after one year. This situation would bring out an individual’s personal interests into the game, especially if the players are being rational, similar to the assumptions in the Nash equilibrium (98). However, if players are able to play through such a situation, it means that they were able to weigh in all of the options and that by assuming that the other one would play according to the strategy with the best outcome, the players would get the best, or the least-harsh outcome for both. In one of my previous experiences for example, our whole group can get punished by not submitting our reports on time. Word got around of the instructor’s reputation of asking each group member individually, and anyone who confesses would get the good grade and that the rest of the group would flunk. For us in the group, sticking to each other’s back proved to be a good choice since we still got a good grade despite having to hear the teacher nag us endlessly. 5. A person is said to have a weakly dominated action if his or her actions are comparable or even better than the other players’ strategies, no matter what is the outcome of the game (Osborne 62). By adjusting the strategies being formed based on the events that preceded the action as well as the possible outcomes of different options, the game could get smaller and the players can easily gauge the outcomes of all possible actions, and eventually no one strategy would gain too large an edge over the other (Myerson 61). This gives equal chances for all players to win, depending on the choices in succession. For example, if a friend and I were to play in a game show and one picks an odd number and the other even from numbers 1-7, there is a 2/4 chances of the odd being a consecutive number to a given even number, and the even number has a 1/3 chance of being consecutive to a given odd number. In the event that the number 3 is chosen, there is a 2/4 chances that the number picked by the other would be consecutive to 3, which is 2 or 4. Since the order of elimination matters in IEDS, after several subgames all strategies that would remain are the results of each of the players choosing what the best response of the other player would be before putting out their own (Osborne 109). Works Cited Heap, Shaun Hargreaves and Yanis Varoufakis. Game Theory: A Critical Introduction. New York, NY: Routledge, 1995. Print. Maoz, Zeev. and Ben D. Mor. Bound by Struggle: The Strategic Evolution of Enduring International Rivalries. Michigan: The University of Michigan Press, 2002. Print. Myerson, Roger B. 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