Homework Chapter 5

# Exercise 5.8

# 

# Exercise 5.21

Which of the following are true and false? Give brief explanations.

## In a fully observable, turn-taking, zero-sum game between two perfectly rational players, it does not help the first player to know what strategy the second player is using-that is, what move the second player will make, given the first player’s move.

False. It would be helpful to position your player at lowest utility for the opponent. Knowing their strategy would help with that.

## In a partially observable, turn-taking, zero-sum game between two perfectly rational players, it does not help the first player to know what move the second player will make, given the first player’s move.

True. In a partially observable game, it does not provide much information to know what move the second player will make.

## A perfectly rational backgammon agent never loses.

False. There is random chance with backgammon.