

## Part I (due at the beginning of class Friday, October 31 🎃, 2025)

Finish reading Chapter 3 and read Chapters 4 and 5 (they're both rather short). Note on the game at the end of Chapter 3: this is the one you may have already played several times in class last Friday, so you don't have to play it again if so (and if not, decide if you have time to do so or if you just want to read what the author's class did).

Remember that what you turn in for Part I should have 3 parts, as mentioned in the syllabus:

- (a) Your responses to the reading questions below.
- (b) Your own questions/comments on the reading.
- (c) The amount of time you spent on Part I (including the time spent reading).

### Reading Questions

- 1. What do you think of the fishing strategy example?
- 2. What, if any, other patterns do you see in Table 5.1?

## Part II: Exercises (prepare for class 🦉 Friday, October 31, 2025 🦉)

- 1. Chapter 3 Exercise 5
- 2. Chapter 4 Exercise 1

## Part III: Homework Problems (due Wednesday, November 5 at the beginning of class)

- 1. A strategy in a matrix game is called *superdominant* for a player if the worst possible outcome when playing that strategy is better than the best possible outcome when playing any other strategy, no matter what the other player does. A strategy is called *weakly dominant* for a player if the outcome when playing that strategy is never worse than the outcome when playing any other strategy, no matter what the other player does.
  - (a) Create a matrix game in which Rose has a superdominant strategy.
  - (b) In a  $2 \times n$  matrix game, what does the payoff graph (like in Figure 3.1) look like if Rose has a superdominant strategy? What if she has a weakly dominant strategy?
  - (c) True or False: a player can have two weakly dominant strategies.

## Friday's mini-Celebration of Learning

Matrix games: saddle points, dominance, Principle of Higher Order Dominance, oddments and probabilities, expected values, solving.