Part I (due at the beginning of class Wednesday, November 5, 2025)

No Part I for this time, but we will discuss things from Chapters 4–6 on Wednesday, so refresh your reading as needed on those.

Part II: Exercises (prepare for class Wednesday, November 5, 2025)

1. Consider Newcomb's problem again (p. 33 has it as a matrix game).
   (a) With the amounts in the boxes as given, what's the tipping point of the Being's predictive powers that will give you a better expected value when you take both boxes as opposed to just taking Box #2? As in, what percentage of the time does the Being need to be wrong in order to make it a better strategy expected-value-wise to take both boxes?
   (b) If instead we keep the predictive powers the same (the Being is correct 90% of the time), what amounts in the boxes will make it a better strategy expected-value-wise to take both boxes?
2. Chapter 6 Exercise 1

Part III: Homework Problems (due Wednesday, November 12 at the beginning of class)

1. True or False: using the Principle of Higher Order Dominance, a matrix game that does not have a saddle point cannot reduce to a matrix game with a saddle point. If true, prove; if false, give an explained counterexample.

Portfolio Assignment

Choose one of the versions of tic-tac-toe that we've played in class that we did not solve and that is not the original tic-tac-toe and analyze it as far as you can using as many of the tools we develop in this class as possible (so this is an ongoing assignment).