Microeconomics, Module 16, "The Theory of Games"

Micro module 16: Readings for tenth edition

(The attached PDF file has better formatting.)

{The Landsburg textbook is excellent. We say to read certain sections and to skip others. This does not mean that certain sections are better; it means that the homework assignments and exam problems are based on the sections that you must read for this course. Some skipped sections are fascinating but are not tested.}

Read the introduction and section 12.1. Focus on Nash equilibrium, Pareto optimality, and dominant strategy, which are discussed several times in this section. Know well the *prisoner's dilemma* game for the final exam. The text uses several games to show the relations of dominant strategies to the possible outcomes (pigs in a box, battle of the sexes, and copycat games). A final exam problem may ask how many Nash equilibria or Pareto optima exist in a scenario.

Sometimes Landsburg finds an intriguing theory that is simply wrong. He refers to an article that explains city differences in auto rates by a complicated game. This is nonsense. Prices are proportion to loss costs plus expenses, which depend on a host of factors. Uninsured motorists contribute to a small degree; other items are more important.

Read section 12.2. Insurers continually change pricing and marketing strategies in response to competitors' actions, so the analysis is a mix of sequential and non-sequential games.

Read the summary at the end of the chapter.

Review end of chapter problems 1, 2, 3, 4, 5. Eight game matrices and six questions (#3 has two parts) gives 48 questions. Spend an hour working through the logic of these items. After a few games, the reasoning is clear. The final exam gives a similar game matrix. These questions are not easy; it takes time to master the reasoning. The final exam problem is a version of the Jack and Jill game matrix, though with different payoffs.