

Voting Systems

Read the book chapters first, then make sure you can answer the questions in the notes. Following that, work on some skills-check problems and exercises. Then take the online quizzes.

Reading 9.1, 9.2

Skills Check 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13

Exercises 1, 2, 3, 4, 5, 7, 9, 10

Quiz Take the quiz¹

9.1

- What is a *preference list ballot*?
- Why do we always assume there is an odd number of voters?

9.2

- How does *majority rule* work?
- What are the three desirable properties that the majority rule have?
- When do we say that a voting system is *monotone*?
- What system do we call a *dictatorship*? What system do we call *imposed rule*? How do those 2 systems differ?
- What does May's theorem tell us?
- Come up with some other systems for deciding the winner in a 2-way election. Which properties do your systems violate?
- How does *Condorcet's Method* work?
- What is *Condorcet's Voting Paradox*?

¹<https://moodle.hanover.edu/mod/quiz/view.php?id=5017>