

Today: Decidability. §§ 4.0–4.1.

Next class: Undecidability. §§ 4.2.

Reminders: Homework. Reading. Newsgroup.

1. List the members of your group below. Underline your name.
2. Prove or disprove: The set of infinite strings over the alphabet $\{a, b, c\}$ is countable.
3. Prove or disprove: The set of three-dimensional integer lattice points is countable.
4. Prove or disprove: The set of all syntactically correct Python programs is countable.

5. Prove or disprove: The language of context-free grammars that generate the empty string is decidable.

6. Prove or disprove: The set of strings that are *Python* programs that each output 0 for all inputs is a decidable language.