Today: The class NP, and NP-completeness. §§7.3–4.
Next class: NP-complete problems. §7.5. Quiz 2 next Tue.

1. List the members of your group below. Underline your name.

2. Provide a program that is a polynomial time verifier for HAMPATH. Explain the format of the input and certificate assumed by your program. Justify its correctness.
3. Prove or disprove: \((x \lor y \lor \overline{z}) \land (\overline{x} \lor \overline{y} \lor z) \land (x \lor y \lor z) \land (\overline{x} \lor \overline{y} \lor \overline{z})\) is satisfiable.

4. Trace Euclid’s algorithm to compute the GCD of 3838 and 19302.

5. Prove or disprove each: The class P is closed under

   (a) complement.

   (b) union.

   (c) concatenation.