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: $(x \vee y \vee \bar{z}) \wedge (\bar{x} \vee \bar{y} \vee z) \wedge (x \vee \bar{y} \vee z) \wedge (\bar{x} \vee \bar{y} \vee \bar{z})$ 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.