1. (1 pt.)

     - This *quick check* is **closed book, notes, etc.**
     - You may use a 3 in. × 5 in. **reference card**, *hand-written by you.*
     - Use the **classroom and textbook conventions** and terminology.

   Read the above carefully; then write your name below:

2. (2 pts.) List the two steps of the *substitution method* for solving recurrences.

3. (2 pts.) In the *recursion tree* method for solving recurrences, what does each node in the tree represent?

4. (2 pts.) What is the form of recurrences that can be solved using the *master method*? (Provide a template for such recurrences.)

5. (3 pts.) How do we determine which of the three cases of the *master theorem* applies to a given recurrence? (Provide the predicates used to determine which case applies.)