## 1. (1 pt.)

- This quick check is closed book, notes, etc.
- You may use a 3 in.  $\times$  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. (3 pts.) What are the conventional names of the three kinds of rotations used by splay trees? Which of those is unique to splay trees?
- 3. (2 pts.) How many trees are maintained in the top-down pass used by top-down splay trees?
- 4. (2 pts.) In the context of the analysis of bottom-up splaying, how is the *rank* of a node defined?
- 5. (2 pts.) State one advantage and one disadvantage of splay trees as compared with red-black trees.