

1. (1 pt.)

- This *quick check* is **closed book, notes, etc.**
- Use the **classroom and textbook conventions** and terminology.

Read the above carefully; then write your name below:

2. (6 pts.) In a red-black tree: [fill in the blanks as precisely as possible]

- (a) every _____ contains the same number of black nodes.
- (b) consecutive _____ nodes are disallowed.
- (c) newly inserted nodes are initially colored _____ .

3. (3 pts.) Why is it that the textbook's implementation of red-black trees does not include checks for Java `null` links when traversing the tree? [The correct answer can be stated in one short sentence.]