

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. (4 pts.) Answer briefly:

(a) In the context of external sorting, what is *replacement selection* used for?

(b) In *polyphase merging*, a k -way merge is performed using how many tapes?

3. (5 pts.) In the context of Reynolds's paper, define the *k-generalized Fibonacci numbers*. (A precise definition in prose is fine; you do not need to use mathematical notation, although you may.)