True or false?

1. An inductive proof always has exactly one base case.
2. Strong and weak induction are equally powerful.
3. Recursion is a programming technique and induction is a proof technique.
4. Stack frames are used to preserve data across recursive calls.
5. Arrays allow random access.
6. Arrays can be dynamically resized.
7. Lists allow random access, provided they are doubly-linked.
8. Induction can only be used to prove properties of the natural numbers.

Multiple Choice

9. Which of the following can appear in a stack frame?
   - local variables
   - method parameters
   - return address

Short Answer

10. What was Mr. Olin’s first name?