1. Choose the three components of the state of a program in denotational semantics (as described in class) from the following list:

(a) assignment
(b) memory function
(c) input stream
(d) Boolean expression
(e) command
(f) output stream
(g) integer expression

**Answer:** b, c, f

2. Let $S$ be the set of states of a program. The range of the denotational semantics of a command is $S \cup \{\text{error}\}$. True or false? **Answer:** true

3. The only component of the state of a program changed by a `read` command is the input stream. True or false? **Answer:** false (it also changes the memory function)