1. Given the grammar $G=(V,T,S,P)$ where $V=\{0,1,S,A\}$, $T=\{0,1\}$ and $P$ is:
   
   \[
   S \rightarrow 0A|11S|\lambda
   \]
   
   \[
   A \rightarrow \lambda|00S
   \]
   
Which describes the language?
   
   a. Strings of all 0s or all 1s
   
   b. Strings with an odd number of 0s and even number of 1s
   
   c. Strings with two 1s followed by 0s or 1s
   
   d. None of the above

2. Circle all that are true: In a grammar,
   
   a. “$x^*$” means “0 or more $x$’s”.
   
   b. Non-terminals cannot appear in the left hand side of productions.
   
   c. Terminals are part of the vocabulary.
   
   d. S must be the starting non-terminal.

3. Circle all that are true:
   
   a. A derivation shows how a string could be produced from a grammar.
   
   b. A derivation tree is another representation of a grammar.
   
   c. All grammars can be expressed as regular expressions.
   
   d. Regular expressions are defined over sets.

4. Circle one: If these ints (6, 2, 5, 1, 9) are added to a stack in the order given, which will be the first to be removed:
   
   a. 6
   
   b. 2
   
   c. 1
   
   d. 9

5. Circle all that are true:
   
   a. Because a stack can be implemented using an ArrayList, all of the standard ArrayList methods are available to the user of the stack.
   
   b. The item removed first from a stack is called the “top”.
   
   c. Stacks are used to track recursion.
   
   d. Stacks are always implemented using an ArrayList.