1. (2 points each) Place a checkmark (✓) next to each of the provided programs that could produce the precise output that is listed, assuming that the user enters the input that is illustrated.

2. (3 points each) For each program in a list (each using one function in addition to main), the output listed is desired, but instead an error message is generated. Cross out the one line in the program that causes the error, and neatly print a corrected version of that line next to it.

3. (6 points) Using one character (or digit) per slot in the grid that is provided, specify the precise output of a particular program (which uses nested functions).

4. (6 points) Using one character (or digit) per slot in the grid that is provided, specify the precise output of a particular program (which emphasizes name scoping).

5. Refer to a specified program.
   a) (2 points) Specify exactly how many times the recursive function that it contains is called in the program.
   b) (6 points) Using one character (or digit) per slot in the grid that is provided, specify the precise output of the program.

6. (8 points) A specified program (using a C++ struct) is set up to deal with a certain scientific problem. Using a related formula, write the correct code for a particular function (with a provided prototype).

7. Referring to a provided set of preprocessing statements, global constant declarations, and a class definition:
   a) (3 points) Write the code for the implementation of the default constructor for the class, with certain initializations for its data members.
   b) (3 points) Write the code for the implementation of the accessor function for one of the data members of the class.
   c) (4 points) Write the code for the implementation of the mutator function for one of the data members of the class.
   d) (4 points) Write the code for the implementation of one of the member functions of the class.
   e) (5 points) Write the code for the implementation of another of the member functions of the class.
   f) (8 points) Write a main function that uses a variable of the type defined by the class (initialized in a specific manner) and performs certain tasks via its public member functions.

8. (10 points) For each of the highlighted lines in a specified program, there might be a syntax error. If so, neatly print a corrected version of that line to its right; if not, print “NO ERROR” to its right.

9. (6 points) Using one character (or digit) per slot in the grid that is provided, specify the precise output of a particular program (which manipulates string variables).