

Module 1. Introduction to C and C++ Exercises

1. Indicate True or False for the following statements concerning C++'s relationship to the C language.

- _____ (a) C++ is approximately a superset of C.
- _____ (b) Most of the constructs of C are included in C++.
- _____ (c) C++ adds extensions to C that improve the language's syntax, make it easier to use, and that support object-oriented programming.
- _____ (d) There are constructs supported by C that are not supported by C++.
- _____ (e) There are constructs that are present in both C and C++ that have different meanings in the two languages.

2. In the following C++ program segment, change the C-style comments to C++-style comments:

```
/* Compute and echo  
   volume of aquarium */  
fish_number = volume / 256; /*Each fish needs 256 cubic inches of water*/
```

3. Write the #include statement for the standard C++ #include file for input/output.

4. Write three C++ output statements using cout, <<, and endl: (a) one that outputs the variable width, (b) another that outputs the string "length is " and the variable length, and (c) another that outputs the three variables alpha, beta, and gamma.

5. Write two C++ input statements using cin and >>: (a) one that inputs the variable width, (b) another that inputs the three variables length, width, and height.