1. A ____ library ____ is a module whose methods are primarily intended for many other programs to use.

2. A program that calls a module’s methods is referred to as the module’s ____ client ____.

3. An ____ application program interface ____ , or API for short, is a contract to a module. Specifically, it describes how to call each method, defines the return type of the method, and overviews the method’s purpose.

4. A ____ unit test ____ is piece of code that validates a single aspect of a piece of a program.

5. Briefly, describe various tests you would do to validate that \texttt{Math.sqrt()} is implemented correctly.
   
   I would test the following: (1) a negative number to ensure it doesn’t compute anything valid, (2) a zero number to ensure it returns 0, (3) a positive number that I know the square root of, e.g., 81, to ensure the method returns the correct number, and (4) a positive number that is not a perfect square, e.g., 2, to ensure the method returns the correct decimal number.