Peer Instruction 1

Software Testing

Which is the best definition of software testing?
Please select the single correct answer.
A. Playing around with the software until it hopefully works.
B. Finding defects by shipping software to customers.
C. A systematic attempt to reveal defects by running tests.
D. Executing software to see how long it runs before crashing.
E. Any activity that improves the quality of software.

Order the following kinds of testing from lowest to highest level:
1. System testing
2. Module (Component) Testing
3. Integration Testing
4. Unit (Method) Testing
5. Acceptance testing

What is the basic concept of regression testing?
Please select the single correct answer.
A. The method goes back (or regresses) to testing previous versions of the software for correctness, ignoring the current version.
B. The method depends on a previous version of the software that was known to be working.
C. The method is only applicable when a small number of developers are on the project.
D. The method is primarily used in academia, as industry developers don't generally have the time for it.
What is the basic concept of code coverage testing?

Please select the single correct answer.

A. The method involves stepping through software to make sure that each line of code is correct.
B. The method helps reduce the liability of the developer, thus it “covers” the code when shipping to customers.
C. The method ensures that all of the test suite is executed on the software under test.
D. The method is an automated way of determining whether the test suite thoroughly tests the software.

Which of the following Java assertions is correct and useful?

A. assert s.equals("someString") : "s has the wrong value: " + s;
B. assert true : "code path should be unreachable";
C. assert false : "stop execution here for no good reason";
D. assert x + 10 : "adds 10 to variable but never asserts";
E. assert : "always asserts!";