Multiple-Choice Questions:

1. T or F? Coupling and cohesion are closely linked in that as one increases, so does the other.

    a. True

    b. False

2. Given classes *A* and *B*, which of the following is <u>not</u> a common type of coupling in object-oriented software?

    a. *A* is a direct or an indirect subclass of *B*

    b. A method parameter or local variable in *A* references *B*

    c. *A* has an instance variable that refers to *B*

    d. *A* invokes methods of *B*

    e. None of the above

3. What is the typical relationship between coupling and cohesion?

    a. There is no relationship between coupling and cohesion.

    b. As cohesion increases, coupling increases.

    c. As cohesion increases, coupling decreases.

4. [2pts] All else being equal, which is more desirable?

    a. Higher cohesion and higher coupling

    b. Higher cohesion and lower coupling

    c. Lower cohesion and lower coupling

    d. Lower cohesion and higher coupling

    e. None of the above is more desirable than the others.

Solutions:

1. b (as coupling increases, cohesion decreases)

2. e

3. c

4. b

Multiple-Choice Questions:

1. SRP is short for:

    a. Software Requirements Process

    b. Sequential Response Protocol

    c. Server Receive Packet

    d. Single Responsibility Principle

    e. None of the above

2. Which of the following best exemplifies SRP?

    a. Writing test code before you write the code under test

    b. Creating mock objects to stand in for other objects in the system

    c. Dividing each user story to be built next iteration into tasks and assigning each task to a developer on the team

    d. For objects of a class C, creating a DAO (which knows how to read/write C objects to a database) instead of putting all that database accessing logic in the C class

    e. Collecting feedback from the customer at the end of each iteration, instead of waiting until the system is finally delivered

Solution:

1. d

2. d