

Classes & Inheritance

1. Suppose we have written a class called BankAccount with a method inside it, defined as:

```
public double computeInterest(int rate)
```

If the client code has declared a BankAccount variable named acct, which of the following would be a valid call to the above method?

- a. double result = computeInterest(acct, 42);
- b. acct.computeInterest(42.0, 15);
- c. int result = BankAccount.computeInterest(42);
- d. double result = acct.computeInterest(42);
- e. new BankAccount(42).computeInterest();

2. The following println statement (the entire line) is equivalent to what?

```
Point p1 = new Point();
```

```
...
```

```
System.out.println(p1);
```

- a. System.out.println(toString(p1));
- b. p1.toString();
- c. System.out.println(p1.toString());
- d. System.out.println(p1.string());
- e. System.out.println(Point.toString());

3. Which of the following is the correct syntax to indicate that class A is a subclass of B?

- a. public class B extends A {
- b. public class A : super B {
- c. public A(super B) {
- d. public class A extends B {
- e. public A implements B {

4. Consider the following classes:

```
public class Vehicle {...}
```

```
public class Car extends Vehicle {...}
```

```
public class SUV extends Car {...}
```

Which of the following are legal statements?

- a. Vehicle v = new Car();
- b. Vehicle v = new SUV();
- c. Car c = new SUV();
- d. SUV s = new SUV();
- e. SUV s = new Car();
- f. Car c = new Vehicle();