

Java 11 Chapter 7 (from version 1)

13 Questions

1. A subclass inherits all the fields and methods from its superclass.

2/3 ☒ A True

1/3 ☐ B False

2. Which of the following are true?

3/3 ☒ A You can write a new instance method in the subclass that has the same signature as the one in the superclass, thus overriding it.

3/3 ☒ B You can declare new methods in the subclass that are not in the superclass.

3/3 ☒ C You can declare new fields in the subclass that are not in the superclass.

0/3 ☐ D None of the above.

3. The 'IS-A' test can be used to determine whether an item:

3/3 ☒ A is a subclass

0/3 ☐ B should be a method

0/3 ☐ C is an attribute

0/3 ☐ D should be overridden

4. Considering the code, which of the following is true? `public class Cat extends Animal { ... }`

0/3 ☐ A Cat 'has-a' Animal

3/3 ☒ B Cat 'is-a' Animal

0/3 ☐ C Animal 'is-a' Cat

0/3 ☐ D Cat 'has-a' Cat

5. A kumquat is:

1/3 ☐ A An orange

0/3 ☐ B A Grape

1/3 ☐ C Both

1/3 ☒ D Citrus

6. A subclass can use the "extends" keyword to extend multiple superclasses.

2/3 ☐ A True

1/3 ☒ B False

7. A superclass called Fruit contains a method called display() that outputs a message to the terminal. Apple is a subclass of Fruit. Which code segment IN THE SUBCLASS Apple will successfully call that method?

1/3 ☒ A super.display();

2/3 ☐ B Fruit.display();

0/3 ☐ C display(Fruit);

0/3 ☐ D Apple.display();

8. Which of the following are true with regard to inheritance?

0/3 ☐ A A subclass must have methods or instance variables in its source code

3/3 ☒ B A subclass is can be a superclass to another class

3/3 ☒ C A subclass is able to override methods of a superclass

3/3 ☒ D A subclass inherits instance variables and methods from a superclass

9. A superclass with a method that has the same header as a subclass will override the subclass' method.

0/3 ☐ A True

3/3 ☒ B False

10. You have two classes shown below. If you run a test drive and create a Surgeon object and call the treatPatient method, what will the output be?

```
public class Doctor {
    boolean worksAtHospital;
    void treatPatient() {
        System.out.println("Pop some pills");
    }
}

public class Surgeon extends Doctor {
    void treatPatient() {
        System.out.println("I'm going to put you under and perform surgery");
    }
    void makeIncision() {
        System.out.println("Snip, Snip");
    }
}
```

0/3 ☐ A Pop some pills

0/3 ☐ B Pop some pills I'm going to put you under and perform surgery

3/3 ☒ C I'm going to put you under and perform surgery

0/3 ☐ D I'm going to put you under and perform surgery Snip, Snip

11. Method "overloading" is when:

0/3 ☐ A Two or more methods have the same name, and the same number and type of parameters, but different return types

3/3 ☒ B Two or more methods have the same name but different numbers or types of parameters

0/3 ☐ C A method can take any number of arguments of the same type

0/3 ☐ D A method calls the method of the same name of its superclass

12. Assuming the upper code is part of a Thing class and the lower code has an instance of the class called thing, what will the result be?

```
...
public String getValue() {
    return "20";
}
public int getValue() {
    return 20;
}
...
System.out.println("Twice thing's value is: "
    (thing.getValue() + thing.getValue()) );
...
```

- 0/3 ☐ A Twice thing's value is: 40
- 2/3 ☐ B Twice thing's value is: 2020
- 0/3 ☐ C The code will not run
- 1/3 ☒ D The code will not compile

13. Write the method header for a method named "playRecord" that accepts three parameters: an int for the track number, an int for the speed (rpms), and a String for the track title. The method will not return anything.

✗ Anon anondaf1ce42d8bf4011

1/3 | public void playRecord(int trackNumber, int speedRPM, String trackTitle)

✗ Anon anone129b452a63741b4

1/3 | void playRecord(int, rpms, String) {}

✗ Anon anonf1ac7f49a13a48b1

1/3 | public void playRecord(int trackNumber, int speed, String trackTitle) {
| }