

## Java 111 Chapter 7 (from version 1)

Total Questions: 13

Most Correct Answers: #9

Least Correct Answers: #2

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

6/8 ☒ A True

1/8 ☐ B False

2. Which of the following are true?

4/8 ☒ 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.

4/8 ☒ B You can declare new methods in the subclass that are not in the superclass.

2/8 ☒ C You can declare new fields in the subclass that are not in the superclass.

0/8 ☐ D None of the above.

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

6/8 ☒ A is a subclass

1/8 ☐ B should be a method

1/8 ☐ C is an attribute

0/8 ☐ D should be overridden

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

0/8 ☐ A Cat 'has-a' Animal

8/8 ☒ B Cat 'is-a' Animal

0/8 ☐ C Animal 'is-a' Cat

0/8 ☐ D Cat 'has-a' Cat

5. A kumquat is:

1/8 ☐ A An orange

1/8 ☐ B A Grape

2/8 ☐ C Both

3/8 ☒ D Citrus

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

3/8 ☐ A True

5/8 ☒ 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?

2/8 ☒ A super.display();

5/8 ☐ B Fruit.display();

1/8 ☐ C display(Fruit);

0/8 ☐ D Apple.display();

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

2/8 ☐ A A subclass must have methods or instance variables in its source code

6/8 ☒ B A subclass is can be a superclass to another class

7/8 ☒ C A subclass is able to override methods of a superclass

7/8 ☒ 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.

0/8 ☐ A True

8/8 ☒ 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?

2/8 ☐ A Pop some pills

2/8 ☐ B Pop some pills I'm going to put you under and perform surgery

3/8 ☒ C I'm going to put you under and perform surgery

0/8 ☐ D I'm going to put you under and perform surgery Snip, Snip

```
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");
    }
}
```

11. Method "overloading" is when:

- 1/8 ☐ A Two or more methods have the same name, and the same number and type of parameters, but different return types
- 2/8 ☒ B Two or more methods have the same name but different numbers or types of parameters
- 2/8 ☐ C A method can take any number of arguments of the same type
- 3/8 ☐ 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?

- 1/8 ☐ A Twice thing's value is: 40
- 4/8 ☐ B Twice thing's value is: 2020
- 1/8 ☐ C The code will not run
- 2/8 ☒ D The code will not compile

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

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 anon0ba33fbf1b5a45c5

✗ `public void playRecord(int trackNumber, int speedRPMs, String trackTitle) {  
}`

Anon anon41f4bdf5c9e44c98

✓ `public void playRecord(int trackNumber, int speed, String trackTitle)`

Anon anona4f3a930657e4b67

✗ `public void playRecord (int track, int speed, String title) {  
//do stuff, System.out.println(...)  
}`

Anon anoncf86babd3f974340

✗ `public void playRecord(int trackNumber, int speed, String trackTitle) {  
}`

Anon anon60c48170d454fdc

`public void playRecord(int trackNumber,int speed,String trackTitle) {  
  
}`

Anon anone0bf27e7f8844106

`public void playRecord(int trackNumber, int rpms, String trackTitle) {  
  
}`

Anon anone1f419c0b19340d9

✗ `public void playRecord(int trackNumber, int speed, Sting trackTitle){...}`

Anon anone5a2b898bcdd46ea

✗ `void playRecord(int trackNumber, int speed, String trackTitle)`