CSSE 220 – Object-Oriented Software Development
Rose-Hulman Institute of Technology

Worksheet 13

Name (Print):_____   Section:_____

1. Select from the following: IS-A, HAS-A, DEPENDS-ON

   1) Dog implements Animal: _____

   2) Class Zoo has a field - List$< Animal >$: _____

   3) Class Car passes a method drive() from the class Drivable into its method: _____

   4) Dog extends Animal: _____

2. Inheritance is a mechanism when a _____ automatically gains the fields and methods of its _____ by using the extends keyword

3. What is the name of the top most class in Java: _____

4. Select the correct statements:

   1) A subclass does not inherit superclass private members

   2) A subclass inherits superclass private members

   3) A subclass inherits superclass constructors

   4) A subclass can invoke superclass constrictors

   5) A subclass can override public and protected superclass methods

   6) A subclass cannot override public and protected superclass methods

5. Invoke superclass:
   1) You have a superclass method drive(): _____

   2) You have a superclass constructor Vehicle(int year, String model): _____

6. Write the output for each method below:

```java
class Animal {
    void move() { System.out.println("Animal is moving."); }
    void eat() { System.out.println("Animal is eating."); }
}

class Dog extends Animal {
    @Override void move()
    { System.out.println("Dog is running."); }
    void bark() { System.out.println("Dog is barking."); }
}

public class Geeks {
    public static void main(String[] args)
    {
        Dog d = new Dog();
        d.move(); // Output 1 : _____
        d.eat(); // Output 2 : _____
        d.bark(); // Output 3 : _____
    }
}
```