Name _____

1) Based on the comments and code, insert the proper keywords below: [6]

```java
public abstract class Vehicle {

__public__   String name; // Can be seen by all external
classes and methods

___private___   double counter; // Can only be seen only
within the same class

__protected___   double kpl;  // Can be seen within the
package and by inherited classes

/*
* Constructor – Can be instantiated using the new keyword
*/

  __public___ Vehicle(String name) {
    this.name  name;
    kpl = 10.1;
    counter = 0;
    }

public ___abstract__ double getLoadFactor();

public __double__ getRange() {
    double capacity = 70.0; // liters
    return kpl * capacity;
    }
}
```

2) Complete the following sentences: [4]

A class that is defined within another class is called an **__inner (or nested)__** class.

In Java, the __static____ keyword may be used on a variable, a method, or a code block.

Use the following class to answer the question below:
```java
public class SimRunnable implements Runnable {
  public void run() {
        doSim();
    }
}
```

4) In the space below, make a thread that creates the Runnable class and begins its
execution: [4]
```java
public class TestThread {
    public static void main (String args[] ) {
    // Answer: Write your code below

    SimRunnable sRun = new SimRunnable();   // +1 Runnable
    Thread thread = new Thread(sRun);       // +2 Thread+run
    Thread.start();                         // +1 start()




    } // main
} // class TestThread
```

5) Are the following lines of code valid?   [3]
                                    Answer: **Circle TRUE or FALSE below**

```java
public class EnumTest {
    enum Category { ELECTRICAL, LUMBER, PLUMBING }
    Category cat = Category.LUMBER;
     public EnumTest() {
        System.out.println("Current cat is " + cat +
                    " ordinal value " + cat.ordinal());

        setCat(Category.valueOf("LUMBER"));//  TRUE / FALSE
        setCat(Category.HOUSEHOLD);        //  TRUE / FALSE
        setCat(Category.ELECTRICAL);       //  TRUE / FALSE
    }
    public void setCat(Category cat) { this.cat = cat; }
}
```

6) Enter the best answer to complete the sentence: [3]

The **extends** keyword represents the O-O tenant of ___**inheritance**___.

The ___**Observer** ___ pattern allows a subscribing class to receive events.

The **private** keyword supports the O-O tenant of ___**encapsulation**_____.