

Name: Answer Sheet

Date: 05/31/2016

Quiz name: Module 1 - Week 2 Review

Score: 100%

```
List groceryList = new ArrayList( );
```

```
groceryList.add( "Milk" );  
groceryList.add( "Eggs" );  
groceryList.add( "Bread" );  
groceryList.add( "Onions" );  
groceryList.add( "Olive Oil");
```

✓ 1.

```
groceryList.remove( 0 );  
String item = groceryList.get( 2 );
```

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

What does this code snippet display?

- ☐ A Milk
- ☐ B Eggs
- ☐ C Bread
- ☒ D Onions
- ☐ E Olive Oil
- ☐ F I don't know

```
Map<String, String> zip2city = new HashMap<String, String>( );
```

```
zip2city.put( "44103", "Cleveland" );  
zip2city.put( "44105", "Cleveland" );  
zip2city.put( "43085", "Columbus" );  
zip2city.put( "43204", "Columbus" );  
zip2city.put( "45201", "Cincinnati" );  
zip2city.put( "45205", "Cincinnati" );
```

✓ 2.

```
String city = zip2city.get( "43085" );
```

What is the value of the variable "city" at the end of this code snippet?

Columbus

```
Map<String, String> zip2city = new HashMap<String, String>( );
```

```
zip2city.put( "44120", "Shaker Heights" );  
zip2city.put( "44120", "Cleveland" );
```

✓ 3.

```
String city = zip2city.get( "44120" );
```

What is the value of the variable "city" at the end of this code snippet?

Cleveland

```
#####  
// Automobile.java  
#####
```

```
public class Automobile {
```



4.

```
    private int numberOfPassengers;
```

```
    private int milesPerGallon;
```

```
    private int gasTankCapacityInGallons;
```

```
    public Automobile() {
```

```
        numberOfPassengers = 5;
```

```
        milesPerGallon = 30;
```

```
        gasTankCapacityInGallons = 15;
```

```
    }
```

```
    public Automobile( int numberOfPassengers, int milesPerGallon, int gasTankCapacityInGallons  
    ) {
```

```
        this.numberOfPassengers = numberOfPassengers;
```

```
        this.milesPerGallon = milesPerGallon;
```

```
        this.gasTankCapacityInGallons = gasTankCapacityInGallons;
```

```
    }
```

```
    public int getTotalRangeInMiles() {
```

```
        return gasTankCapacityInGallons * milesPerGallon;
```

```
    }
```

```
    }
```

```
#####
```

```
// AutomobileDemo.java
```

```
#####
```

```
public class AutomobileDemo {
```

```
    public static void main( String[] args ) {
```

```
        int bestRange;
```

```
        Automobile truck = new Automobile( 2, 16, 22 );
```

```
        Automobile smartCar = new Automobile( 2, 41, 8 );
```

```
        if( smartCar.getTotalRangeInMiles() > truck.getTotalRangeInMiles() ) {
```

```
            bestRange = smartCar.getTotalRangeInMiles();
```

```
        } else {
```

```
            bestRange = truck.getTotalRangeInMiles();
```

```
        }
```

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

```
    }
```

```
}
```

What number is displayed by the main method of AutomobileDemo?

352

```
// #####  
// Triangle.java  
// #####  
public class Triangle {
```



5.

```
    public int base;  
    public int height;
```

```
    public Triangle( int base, int height ) {
```

```
        this.base = base;  
        this.height = height;  
    }  
}
```

```
// #####  
// TriangleDemo.java  
// #####  
public class TriangleDemo {
```

```
    public static void main( String[] args ) {
```

```
        Triangle t = new Triangle(3, 5); // line 1  
        System.out.println("Base : " + t.base ); // line 2  
        System.out.println("Height : " + t.height ); // line 3  
        int area = t.base * t.height; // line 4  
        System.out.println(area); // line 5  
    }  
}
```

Which (if any) of the lines above would cause a compiler error? (Choose all that apply)

- ☐ A line 1 would cause a compiler error
- ☐ B line 2 would cause a compiler error
- ☐ C line 3 would cause a compiler error
- ☐ D line 4 would cause a compiler error
- ☐ E line 5 would cause a compiler error
- ☒ F There is no compiler error
- ☐ G I don't know

```
// #####  
// Triangle.java  
// #####  
public class Triangle {
```



6.

```
    private int base;  
    public int height;
```

```
    public Triangle( int base, int height ) {
```

```
        this.base = base;  
        this.height = height;  
    }  
}
```

```
// #####
// TriangleDemo.java
// #####
public class TriangleDemo {

    public static void main( String[] args ) {

        Triangle t = new Triangle(3, 5); // line 1
        System.out.println("Base : " + t.base ); // line 2
        System.out.println("Height : " + t.height ); // line 3
        int area = t.base * t.height; // line 4
        System.out.println(area); // line 5
    }

}
```

Which (if any) of the lines above would cause a compiler error? (Choose all that apply)

- ☐ A line 1 would cause a compiler error
- ☒ B line 2 would cause a compiler error
- ☐ C line 3 would cause a compiler error
- ☒ D line 4 would cause a compiler error
- ☐ E line 5 would cause a compiler error
- ☐ F There is no compiler error
- ☐ G I don't know

```
// #####
// Circle.java
// #####
```

```
import java.util.Math;
```



7.

```
public class Circle {

    private int diameter;

    public Circle( int diameter ) {

        this.diameter = diameter;
    }

    public int getDiameter( ) {

        return diameter;
    }

    public double getArea( ) {

        Math.PI * Math.pow( getRadius( ), 2 );
    }

    private double getRadius( ) {
```

```

return (double)diameter / 2;
}
}

// #####
// CircleDemo.java
// #####

public class CircleDemo {

    public static void main( String[] args ) {

        Circle c = new Circle(5); // line 1
        System.out.println("Diameter : " + c.getDiameter( ) ); // line 2
        System.out.println("Area : " + c.getArea( ) ); // line 3
    }
}

```

Which (if any) of the lines above would cause a compiler error? (Choose all that apply)

- ☐ A line 1 would cause a compiler error
- ☐ B line 2 would cause a compiler error
- ☐ C line 3 would cause a compiler error
- ☒ D There is no compiler error
- ☐ E I don't know

```

// #####
// Circle.java
// #####

```

```
import java.util.Math;
```



8.

```

public class Circle {

    private int diameter;

    public Circle( int diameter ) {

        this.diameter = diameter;
    }

    public int getDiameter( ) {

        return diameter;
    }

    public double getArea( ) {

        Math.PI * Math.pow( getRadius( ), 2 );
    }

    private double getRadius( ) {

```

```

return (double)diameter / 2;
}
}

// #####
// CircleDemo.java
// #####

public class CircleDemo {

public static void main( String[] args ) {

Circle c = new Circle(5); // line 1
System.out.println("Diameter : " + c.getDiameter( ) ); // line 2

System.out.println("Radius : " + c.getRadius( ) ); // line 3
System.out.println("Area : " + c.getArea( ) ); // line 4
}
}

```

Which (if any) of the lines above would cause a compiler error? (Choose all that apply)

- ☐ A line 1 would cause a compiler error
- ☐ B line 2 would cause a compiler error
- ☒ C line 3 would cause a compiler error
- ☐ D There is no compiler error
- ☐ E I don't know

```

// #####
// Foo.java
// #####

```

```
public class Foo {
```

- ✓ 9.

```
private static int globalTotal = 0;
private int myTotal = 0;
```

```
public void addSome(int n) {
globalTotal += n;
myTotal += n;
}
```

```
public int getTotal( ) {
return myTotal;
}
```

```
public static int getGlobalTotal( ) {
return globalTotal;
}
}
```

```

// #####
// FooDemo.java
// #####

```

```
public class FooDemo {
```

```

public static void main(String[] args) {
    Foo f1 = new Foo( );
    Foo f2 = new Foo( );
    f1.addSome(1);
    f2.addSome(2);
    System.out.print( f1.getTotal( ) );
    System.out.print( f2.getTotal( ) );

    System.out.print( Foo.getGlobalTotal( ) );
}
}

```

What is the output of the FooDemo main method?

123

- ✓ 10. Which of the following member variable declarations follows standard Java naming conventions? (Choose all that apply)
- ☒ A private double milesToCleveland;
 - ☒ B private static double milesToCleveland;
 - ☒ C public static final double MILES_TO_CLEVELAND = 123.4;
 - ☐ D public static final double milesToCleveland = 123.4;
 - ☐ E public static final double miles_to_cleveland = 123.4;
 - ☐ F public static double miles_to_cleveland;
 - ☐ G None of the above follow standard Java naming conventions
 - ☐ H I don't know

```

final int x = 0;
x = 2;

```

- ✓ 11. Will the code fragment above cause a compiler error?
- ☒ A Yes
 - ☐ B No
 - ☐ C I don't know

```

final int x;
x = 2;

```

- ✓ 12. Will the code fragment above cause a compiler error?
- ☐ A Yes
 - ☒ B No
 - ☐ C I don't know

```

final int x;
x = 2;
x = x + 1;

```

- ✓ 13. Will the code fragment above cause a compiler error?
- ☒ A Yes
 - ☐ B No

☐ I don't know

```
String language = "Javascript";  
language.substring(0, 4);  
  
System.out.println(language);
```

✓ 14. **What is displayed by the code above?**

Javascript