

2. **Directions: This is a closed book, closed notes examination. Place your answers in the space provided. The point value of each question is indicated. There are a total of 60 points. Your total out of 60 will be weighted to 100 points. You have 55 minutes for this examination.**

1. (6 pts) What is the output produced by the following statements?

```
System.out.println("\nThere are some \\s and some //s");  
System.out.println("'and some other\nstuff going on");  
System.out.println("\\\n in this output!\n");
```

```
"There are some \s and some //s  
'and some other  
stuff going on  
\n in this output!"
```

2. (9 pts) What is the output of the following Java program?

```
public class Confusing {  
    public static void main(String[] args) {  
        method3();  
        method2();  
        method3();  
        method1();  
    }  
    public static void method1() {  
        System.out.println("I am method 1.");  
    }  
    public static void method2() {  
        method1();  
        System.out.println("I am method 2.");  
    }  
    public static void method3() {  
        method2();  
        System.out.println("I am method 3.");  
        method1();  
    }  
}
```

```
I am method 1.  
I am method 2.  
I am method 3.  
I am method 1.  
I am method 1.  
I am method 2.  
I am method 1.  
I am method 2.  
I am method 1.  
I am method 2.  
I am method 3.  
I am method 1.  
I am method 1.
```

3. (6 pts) What does each of the following expressions evaluate to?

a) $(2.5 + 3) / (11 \% 10) + .1$ **5.6**

b) $89 / 10 \% 4 + 5.5$ **5.5**

c) $2 + 6.2 + \text{"hello"}$ **"8.2hello"**

4. (6 pts) Complete the code in the loop body below so that it prints the following sequence of values exactly as shown:

17, 14, 11, 8, 5, 2, -1, -4, -7, -10,

```
for(int i = 10; i >= 1; i) {  
    // put your code below here  
  
    System.out.print(3*i - 13 + ", ");  
  
}
```

5. (6 pts) What is the output of the following code segment?

```
for (int i = 1; i <= 2; i++) {  
    for (int j = 1; j <= 3; j++){  
        for (int k = 1; k <= 4; k++)  
            System.out.print("*");  
        }  
        System.out.print("!");  
    }  
    System.out.println();
```

*****!*****!

6. (9 pts) Write a code segment (not an entire method or a program!) to produce the following output. Assume that the number 5 is printed in the first column

```
11111
2222
333
44
5
```

```
for (int i = 1; i <= 5; i++) {
    for (int j = 6-i; j >= 1; j--)
        System.out.print(i);
    System.out.println();
}
```

7. (9 pts) Complete the following program by writing the method `trimString()`. This method take two parameters, a `String` and an integer. It returns a new `String` with characters removed from the end of the `String`. The integer is the number of characters to remove. For example, the output of the following program should be

```
hello
Here is another String to trim
This is not trimmed at all
```

```
public class Q7 {
    public static void main (String [] args) {
        System.out.println(trimString("hello there", 6));
        String longString =
            trimString("Here is another String to trim***", 3);
        System.out.println(long);
        System.out.println(trimString("This is not trimmed at all", 0));
    }
}
```

```
// write the method below here
```

```
public static String trimString(String s, int n) {
    return s.substring(0, s.length() - n);
}

}
```

8. (9 pts) What is the output of the following program?

```
import java.awt.*;

public class Q8 {

    public static void main (String [] args) {

        double d = 4.7;
        Point p = new Point(-2, 3);
        System.out.println(d);
        System.out.println(p);
        questionEight(p, d);
        System.out.println(d);
        System.out.println(p);
    }

    public static void questionEight(Point point, double d) {
        d = d + 3.2;
        point.translate(3, 3);
        System.out.println(d);
        System.out.println(point);
    }
}
```

```
4.7
java.awt.Point[x=-2,y=3]
7.9
java.awt.Point[x=1,y=6]
4.7
java.awt.Point[x=1,y=6]
```