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

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

```java
System.out.println("Dear \"DoubleSlash\" magazine,");
System.out.println();
System.out.println("\t Your publication confuses me. Is it");
System.out.println("a \\\\slash\slash slash or a ///\slash slash?");
System.out.println("\nSincerely,");
System.out.println("Anne Done");
```
2. (9 pts) What is the output of the following Java program?

```java
public class Strange {
    public static void main(String[] args) {
        second();
        first();
        third();
    }

    public static void first() {
        System.out.println("Inside first method.");
    }

    public static void second() {
        first();
        System.out.println("Inside second method.");
    }

    public static void third() {
        System.out.println("Inside third method.");
        second();
        first();
    }
}
```
3. (9 pts) What do the following expressions evaluate to?
   a. \( \frac{3}{2} \times 2.4 \)
   
   b. \( 3 + 2 + \text{"Very Pretty Day"} + 3 + 3 \times 2 \)
   
   c. \( 23 \% 8 \% 2 \)

4. (9 pts) What is the output of the following code segment?

   ```java
   for (int i = 1; i <= 6; i++) {
       for (int j = 1; j <= 6 - i; j++) {
           System.out.print("*");
       }
       System.out.print("-");
       for (int j = 1; j <= 2 * i - 1; j++) {
           System.out.print("");
       }
       System.out.println(i);
   }
   ```
5. (9 pts) Write a code segment (not an entire program) to produce the following output. Assume that the numbers are printed in the first column.

5!
4*!
3**!
2***!
1****!

6. (9 pts) Write a method `printVertical()`. This method takes a `String` as a parameter and prints each letter of the `String` on a separate line. For example, a call to `printVertical("Hi there")` would produce:

H
i
t
h
 e
r
 e
7. (9 pts) What output is produced by the following program?

```java
public class Mystery {
    public static void main (String [] args) {
        int x = 1;
        int y = 2;
        int z = 3;
        z = mystery(x, z, y);
        System.out.println(x + " " + y + " " + z);
        x = mystery(z, z, x);
        System.out.println(x + " " + y + " " + z);
        y = mystery(y, z, x);
        System.out.println(x + " " + y + " " + z);
    }

    public static void mystery(int x, int y, int z){
        z++;
        x = y + z;
        y = y - 1;
        return x;
    }
}
```