

Name \_\_\_\_\_

CIS 201 Midterm I: Chapters 1-3

October 6, 2010

**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?

```
System.out.println("Dear \"DoubleSlash\" magazine,");
System.out.println();
System.out.println("\t Your publication confuses me. Is it");
System.out.println("a \\\\) slash or a \\\\) slash?");
System.out.println("\nSincerely,");
System.out.println("Anne Done");
```

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

```
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.  $3 / 2 * 2.4$

b.  $3 + 2 + \text{"Very Pretty Day"} + 3 + 3 * 2$

c.  $23 \% 8 \% 2$

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

```
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?

```
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;
    }
}
```