

Homework 5

1. What is the output of the following program?

```
1 public class MysteryNumbers {
2     public static void main(String[] args) {
3         String one = "two";
4         String two = "three";
5         String three = "1";
6         int number = 20;
7
8         sentence(one, two, 3);
9         sentence(three, two, 1);
10        sentence("eight", three, number / 2);
11    }
12
13    public static void sentence(String three, String one, int number) {
14        System.out.println(one + " times " + three + " = " + (number * 2));
15    }
16 }
```

2. What output is produced by the following program?

```
1 public class MysterySoda {
2     public static void main(String[] args) {
3         String soda = "coke";
4         String pop = "pepsi";
5         String coke = "pop";
6         String pepsi = "soda";
7         String say = pop;
8
9         carbonated(coke, soda, pop);
10        carbonated(say, "say", pop);
11    }
12    public static void carbonated(String coke, String soda, String pop) {
13        System.out.println("say " + soda + " not " + pop + " or " + coke);
14    }
15 }
```

3. Evaluate the following expressions:

- a. `Math.abs(-1.6)`
- b. `Math.abs(2 + -4)`
- c. `Math.pow(6, 2)`
- d. `Math.pow(5 / 2, 6)`
- f. `Math.ceil(115.8)`
- g. `Math.max(7, 4)`
- h. `Math.min(8, 3 + 2)`
- i. `Math.min(-2, -5)`
- j. `Math.sqrt(64)`
- m. `13 + Math.abs(-7) - Math.pow(2, 3) + 5`
- n. `Math.sqrt(16) * Math.max(Math.abs(-5), Math.abs(-3))`