

AP CS Homework: Parameters, Loops, & Math methods
Due Friday 11/04

1. Parameter mystery. Write what is output by the following code:

```
public class MysteryNums {
    public static void main(String[] args) {
        int x = 15;
        sentence(x, 42);

        int y = x - 7;
        sentence(y, x + y);
    }

    public static void sentence(int num1, int num2) {
        System.out.println(num1 + " " + num2);
    }
}
```

2. Find the error. The following program has 9 errors. Circle them all and fix as appropriate.

```
public class Parameters {
    public static void main() {

        double bubble = 867.5309;

        double x = 10.01;

        printer(double x, double y);

        printer(x);

        printer("barack", "obama");

        System.out.println("z = " + z);
    }

    public static void printer(x, y double) {

        int z = 5;

        System.out.println("x = " + double x + " and y = " + y);

        System.out.println("The value from main is: " + bubble);
    }
}
```

3. Expressions. Write the results of each of the following expressions. Make sure to use the proper type (.0 for a double, "" for a String).

Math.ceil(9.17) _____
Math.pow(2, 4) _____
Math.sqrt(64) _____
Math.floor(12.73) + Math.max(8, 5) _____
Math.abs(Math.min(-1, -3)) _____

4. Loop review. What output is produced by the following program?

```
public class OddStuff {
    public static void main(String[] args) {
        int number = 32;
        for (int count = 1; count <= number; count++) {
            System.out.println(number);
            number = number / 2;
        }
    }
}
```

5. Loop review. Write some nested for loops to produce the following output:

```
000111222333444555666777888999
000111222333444555666777888999
000111222333444555666777888999
```

6. Hard parameter mystery. Write what is output by the following code:

```
public class MysterySoda {
    public static void main(String[] args) {
        String soda = "coke";
        String pop = "pepsi";
        String coke = "pop";
        String pepsi = "soda";
        String say = pop;

        carbonated(coke, soda, pop); //
        carbonated(pop, pepsi, pepsi); //
        carbonated("pop", pop, "koolaid"); //
        carbonated(say, "say", pop); //
    }
    public static void carbonated(String coke, String soda, String pop) {
        System.out.println("say " + soda + " not " + pop + " or " + coke);
    }
}
```