

Quiz #4  
SOLUTIONS

Instructions:

1. Do not turn this page until told to do so.
2. This quiz is *closed book* and *closed notes*.
3. *Write your name on every page.*
4. You must give your answer to a question on the *same sheet of paper that the problem appears on*. If you run out of space on the front of the page, you may continue to the back of that page only. If you put your answer on a different page, *you will not receive credit for that problem!*
5. You do not need to do any error checking of input values, *unless the problem specifically asks you to do so!*
6. If you are caught looking at other papers or communicating with other students in any way, you will receive an **F** for this quiz.

**Question 1 (20 pts) Tracing.**

What is the output of the following Java program?

```
public class Q4Tracing{
    public static void main(String[] args) {
        int a = 2, b = 4, c = 5, d = 100;

        System.out.println(a + " " + b);
        System.out.println(c + " " + d);
        a = spaz(b, c);
        d = quip(a, c);
        System.out.println(a + " " + d );
    }

    public static int spaz(int x, int y) {
        x = y % 2;
        y = x + 3;

        System.out.print(x + " * " + y + " = ");
        System.out.println(x * y);

        return x;
    }

    public static int quip(int w, int z) {
        int x;
        x = z - w * 7;
        w--;

        System.out.print(z + " + " + w + " = ");
        System.out.println(z + w);

        return x;
    }
} // end of class
```

**Output**

```
2 4
5 100
1 * 4 = 4
5 + 0 = 5
1 -2
```

