

Quiz #2  
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 static void main(String[] args){
    int num1, num2;
    num1 = 7;
    num2 = 19;
    int val = num1 % num2;
    System.out.println("val is: " + val);
    num2 = num2 + num1;
    num1 += 5;
    System.out.println("num1 is: " + num1);
    System.out.println("num2 is: " + num2);
    double num3 = num2/num1;
    System.out.println("num3 is: " + num3);
    num3 = 3/num3;
    System.out.println("num3 is: " + num3);
    int x = 4, y = 6;
    System.out.print("x: " + x);
    System.out.println(" y: " + y);
    y = Math.min(x, y);
    x--;
    x = Math.max(x, y);
    y++;
    System.out.print("x: " + x);
    System.out.println(" y: " + y);
    System.out.println(x * y);
} // end of main
```

**Output**

```
val is: 7
num1 is: 12
num2 is: 26
num3 is: 2.0
num3 is: 1.5
x: 4 y: 6
x: 4 y: 5
20
```

**Question 2 (20 pts) Coding.**

- Write a program that asks the user to enter two integers. The program should then print out the product of the integers and the sum of the integers.
- Two sample runs have been provided.

**Sample Output:**

```
Enter two integers: 12 11
The product is 132

The sum is 23
```

```
Enter two integers: 7 9
The product is 63

The sum is 16
```

---

```
import java.util.Scanner;

public class Quiz2
{
    public static void main(String[] args)
    {
        Scanner kbd = new Scanner(System.in);

        System.out.print("Enter two integers: ");
        int num1 = kbd.nextInt();
        int num2 = kbd.nextInt();

        int sum = num1 + num2;
        int product = num1 * num2;

        System.out.println("The product is " + product);

        System.out.println();
    }
}
```

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```
        System.out.println("The sum is " + sum);  
    }  
}
```