Practice Quiz #1: Solutions
Write legibly. If I am unable to read your writing, you will receive **zero** points. Put your name on **all** pages.
Note: You can use S.O.P.L() to abbreviate System.out.println() and S.O.P() to abbreviate System.out.print()

1. Trace through the following program and determine the output. Write the output in the Output Window provided. For the first quiz **only**, a memory box has been provided for you.

```
public class PracticeQuiz1
{
    public static void main(String[] args)
    {
        int p, q;
        p = 5;
        q = 23;
        int val = q % p;
        System.out.println("val is: " + val);
        q = q + p;
        p += 5;
        System.out.println("p is: " + p);
        System.out.println("q is: " + q);
        double num = q/p;
        System.out.println("num is: " + num);
        num = 3/num;
        System.out.println("num is: " + num);
        int x = 4, y = 6;
        x++;
        y--;
        System.out.println(x * y);
    }
}
```

Output Window

val is: 3
p is: 10
q is: 28
num is: 2.0
num is: 1.5
25

Memory

p: ~~5~~ 10
q: ~~23~~ 28
val: 3
num: ~~2~~ 1.5
x: ~~4~~ 5
y: ~~6~~ 5

2. Write a program that asks the user to enter two integers. The program should then print out the sum of the integers and the product of the integers. The program structure has been created for you. Two sample runs have been provided.

Sample Output

```
Enter two integers: 10 11
The sum is 21
The product is 110
```

```
Enter two integers: 7 8
The sum is 15
The product is 56
```

```java
import java.util.Scanner;

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

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

        int sum = num1 + num2;
        int product = num1 * num2;
        System.out.println("The sum is " + sum);
        System.out.println("The product is " + product);
    }
}
```