Scanner and Math Test 1

1. Write a line of code that instantiates (creates) a **Scanner** object and stores the reference to the object in a variable named **scan**?
2. Assume that a reference to a Scanner object is stored in a variable named **scan**. Write a line of code that reads a single integer value from the keyboard and stores the value in a variable of type int named **num**.
3. Assume that a reference to a Scanner object is stored in a variable named **scan**. Write a line of code that reads a single floating-point value (double) from the keyboard and stores the value in a variable of type double named **ans**.
4. Assume that a reference to a Scanner object is stored in a variable named **scan**. Write a code segment that prompts a user to enter two integer values from the keyboard multiplies the two input numbers together and stores the result in an integer variable named **answer**.
5. Which of the following generates a random number between 1 and 5 inclusive?
6. (int)(Math.random())
7. (int)(Math.random(5))
8. (int)(Math.random() \* 5)
9. (int)(Math.random() \* 5) + 1
10. Which of the following numbers **cannot** be randomly generated by the following code?

(int)(Math.random() \* 20) + 5

1. 20
2. 5
3. 3
4. 24
5. Given the following code segment:

int num = Math.max(5, Math.min(7, 12));

What value is stored in the variable **num**?

1. 5
2. 7
3. 12
4. 35
5. What type of error occurs in the following code?

integer num = 15;

System.out.println("Num = " + num);

1. syntax error
2. run-time error
3. logic error
4. none
5. What type of error does the following code produce?

int a = 5;

int b = 0;

int c = a / b;

System.out.println("a divided by b = " + c);

1. syntax error
2. run-time error
3. logic error
4. none