

**DISCLAIMER: This is Study-Guide and in no way indicates what will or will not be on the test.**

1. What is y after the following switch statement?

```
int x=0;
int y=0;
switch(x) {
    case 0: y=0;
    case 1: y=1;
    default: y=-1;
}
```

ANSWER: \_\_\_\_\_

2. What is y after the following statements are executed?

```
int x=1;
int y = x = x + 1;
```

ANSWER: \_\_\_\_\_

3. What is the output of the following loop?

```
int j=1, k=0, n=5;
while (j <= n) {
    k = j + (n%j);
    System.out.print(k+" ");
    j++;
}
```

ANSWER: \_\_\_\_\_

4. What is the output of the following code?

```
int x = 1, y = -1, and z = 1;
if ( x > 0 )
if ( y > 0 )
System.out.println("X > 0 and y > 0");
else if (z > 0 )
System.out.println("x < 0 and z > 0");
```

ANSWER: \_\_\_\_\_

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Indicate the number of iteration for each loop. Assume  $n \geq 1$ .

		Answer
5	int i=1; while (i<=n) { i++; }	
6	int i=1; while (i<=0) { i++; }	
7	int i=n; while (i>0) { i--; }	
8	int i=n; while (i>=0) { i--; }	
	int i=n; while (i>0) { i++; }	

9. Write a java statement to generate a random integer value between 50 and 100 (inclusive).

10. Write an if statement that decreases **pay** by 3% if score is **less** that 90.

11. Write a Boolean expression that evaluates **true** if

$100 \leq \text{weight} \leq 200$

12. Convert the following **While** loop to a **for** loop.

```
int sum = 0;
int i=0;
while (i <= 100){
    sum += i;
```

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```
        i=i+1;  
    }
```

13. Write an algorithm that displays the following table. Note that 1 kilogram is 2.2 pounds.

Pounds	Kilogram
20	9.09
25	11.36
.	
.	
.	
510	231.82
515	234.09

14. Use while loop to find the smallest integer  $n$  such that  $n^2$  is greater than 12,000

15. Given  $n$ , calculate and print it's reverse.

Study:

prime number

palindromes

GCD

practice problems from chapter 5 ppt

printing triangles