

Exercise on Lesson 8

In problems 1 – 5 assume the following:

int z = 23, x = -109;
double c = 2345.19, v = 157.03;
boolean a = false, s = true;

1. Boolean gus = (x > 0) && (c == v);
System.out.println(!gus);

false

2. System.out.println(a || s);

true

3. System.out.println((-1 * x) > 0) && !a);

true

4. boolean r = z == x;
System.out.println(r || false);

false

5. System.out.println(z!=x);

true

6. Fill in the following charts.

a	b	(!a && b)
false	false	
false	true	
true	false	
true	true	

a	b	(!a && b)
false	false	false
false	true	true
true	false	false
true	true	false

a	b	(a !b)
false	false	
false	true	
true	false	
true	true	

a	b	(a !b)
false	false	true
false	true	false
true	false	true
true	true	true

7. Assume *b*, *p*, and *q* are *booleans*. Write code that will assign to *b* the result of **AND-ing** *p* and *q*.

```
b = p && q;
```

8. Assign to the *boolean* variable *w* the result of **OR-ing** the following two things:
A test to see if *x* is positive: A test to see if *y* equals *z*:

```
w = x > 0 || y == z;
```

9. What are the two possible values of a *boolean* variable?

```
true  
false
```

10. Write a test that will return a true if *a* is not equal to *b*. Assume *a* and *b* are integers. Store the result in *boolean kDog*.

```
kDog = a != b;
```

11. Write the answer to #10 another way.

```
kDog = !( a == b );
```

12. What is the Java operator for boolean **AND-ing**?

```
&&
```

13. What is the Java operator for boolean **OR-ing**?

```
||
```

14. System.out.println(true && false) || ((true && true) || false));

```
true
```

15. System.out.println(true && true || false);

```
true
```

16. System.out.println(true || true && false);

```
true
```

17. `System.out.println(false || true && false);`

false

18. `System.out.println(false && true || false);`

false