Eric Winsor

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**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**

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

**true**

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

**true**

1. boolean r = z = = x;

System.out.println( r | | false );

**false**

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

**true**

1. Fill in the following charts.

**a** **b** **(!a && b)** **a** **b** **(a | | !b)**

false false false false

false true false true

true false true false

true true true true

**a b (!a && b) a b (a | | !b)**

**false false false false false true**

**false true true false true false**

**true false false true false true**

**true true false true true true**

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

b = p && q;

1. 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;**

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

**true**

**false**

1. 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;**

1. Write the answer to #10 another way.

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

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

**&&**

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

**| |**

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

**true**

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

**true**

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

**true**

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

**false**

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

**false**