**Exercise for 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);

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

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

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

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

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6. Fill in the following charts.

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

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

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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*:

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

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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*.

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11. Write the answer to #10 another way.

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

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

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

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

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

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

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

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