Short Circuit Worksheet

1. int x = 8;

int y = 4;

(x > y) && (y == 4)

* Result: true or false?
* Short Circuit: yes or no?

1. int x = 8;

int y = 4;  
(x > y) || (y == 4)

* Result: true or false?
* Short Circuit: yes or no?

1. int x = 3;

int y = 10;

(y == 3) && (y < x)

* Result: true or false?
* Short Circuit: yes or no?

1. int x = 3;

int y = 10;

(y == 3) || (y < x)

* Result: true or false?
* Short Circuit: yes or no?

|  | **Value** | | **Short-Circuit** | |  |
| --- | --- | --- | --- | --- | --- |
|  | **true** | **false** | **Yes** | **No** |  |
|  |  |  |  |  | true || true || false |
|  |  |  |  |  | false || false || false |
|  |  |  |  |  | false || false || true |
|  |  |  |  |  | true || true || true |
|  |  |  |  |  | true && true && false |
|  |  |  |  |  | false && false && false |
|  |  |  |  |  | false && false && true |
|  |  |  |  |  | true && true && true |

1. What two lines of output will print when this code is run? NOTE: ++x will increment x by 1, THEN check if it equals 1

int x = 0, y = 0, z = 0;

System.out.println( ++x == 9 || ++y == 1 && ++z == 1 );

System.out.println("x is " + x + ", y is " + y + ", z is " + z);

Output Line 1:

Output Line 2:

1. What two lines of output will print? This code will short circuit.

int x = 0, y = 0, z = 0;

System.out.println( ++x == 1 || ++y == 9 && ++z == 1 );

System.out.println("x is " + x + ", y is " + y + ", z is " + z);

Output Line 1:

Output Line 2:

1. What two lines of output will print? One part of this code will short circuit.

int x = 0, y = 0, z = 0;

System.out.println( ++x == 9 || ++y == 9 && ++z == 1 );

System.out.println("x is " + x + ", y is " + y + ", z is " + z);

Output Line 1:

Output Line 2: