BJP5 Self-Check 4.2: logicExpressions1

Language/Type: Java boolean logic expressions
Author: Leslie Ferguson (on 2019/09/19)

Given the following variable declarations:

```
int x = 4;
int y = -3;
int z = 4;
```

What are the results of the following relational expressions?

`x == 4`	`true`
`x == y`	`false`
`x == z`	`true`
`y == z`	`false`
`x + y > 0`	`true`
`x - z != 0`	`false`
`y * y <= z`	`false`
`y / y == 1`	`true`
`x * (y + 2) > y - (y + z) * 2`	`true`

Submit

You passed 9 of 9 tests.

Go to the next problem: ifStatementSyntax

#	question	your answer	result
1	`x == 4`	`true`	pass
2	`x == y`	`false`	pass

BJP5 Self-Check 4.3: ifStatementSyntax

Language/Type: Java if/else syntax
Author: Marty Stepp (on 2019/09/19)

Which of the following `if` statement headers uses the correct syntax?

a. `if x = 10 then {`
b. `if (x == y) {`
c. `if [x == 10] {`
d. `if (x equals 42) {`
e. `if (x => y) {`

(order shuffled)

Submit

You passed 1 of 1 tests.

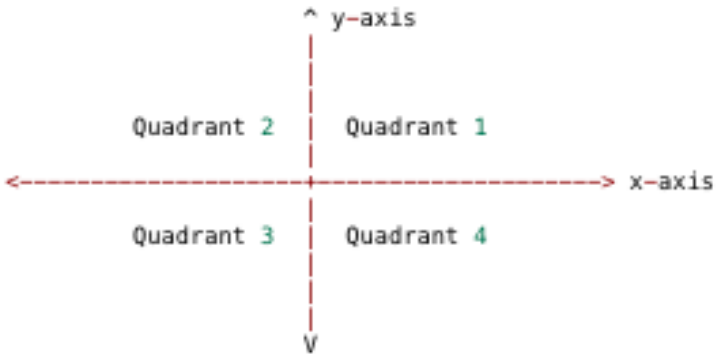
Go to the next problem: Oops4-errors

question #1: Which of the following `if` statement headers uses the correct s
your answer: `if (x == y) {`
result: pass

BJP5 Exercise 4.19: quadrant

Language/Type: Java if/else method basics return
Author: Roy McElmurry (on 2019/09/19)

Write a static method called `quadrant` that takes as parameters a pair of real numbers representing an (x, y) point and tha the quadrant number for that point. Recall that quadrants are numbered as integers from 1 to 4 with the upper-right quadra numbered 1 and the subsequent quadrants numbered in a counter-clockwise fashion:



Notice that the quadrant is determined by whether the x and y coordinates are positive or negative numbers. If a point falls axis or the y-axis, then the method should return 0. Below are sample calls on the method.

Call	Value Returned
`quadrant(12.4, 17.8)`	`1`
`quadrant(-2.3, 3.5)`	`2`
`quadrant(-15.2, -3.1)`	`3`
`quadrant(4.5, -42.0)`	`4`
`quadrant(0.0, 3.14)`	`0`

Type your solution here:

```
1  public static int quadrant(double x, double y){
2      if (x > 0){
3          if (y > 0)
4              return 1;
5          if (y < 0)
6              return 4;
7          else
8              return 0;
9      }
10
11     else if (x< 0){
12         if (y > 0)
13             return 2;
14         if (y < 0)
15             return 3;
16         else
17             return 0;
18     }
19     else
20         return 0;
21 }
```

This is a **method problem.** Write a Java method as described. Do not write a complete program or class; just the method(s) above.

Submit

You passed 7 of 7 tests.

Go to the next problem: numUnique

test #1: quadrant(12.4, 17.8)