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○ BJP4 Exercise 8.3: manhattanDistancePoint

Language/Type:  Java [classes](#) [instance methods](#) [Point](#)

Author: Marty Stepp (on 2016/09/08)

Add the following method to the Point class:

```
public int manhattanDistance(Point other)
```

Returns the "Manhattan distance" between the current Point object and the given other Point object. The Manhattan distance refers to how far apart two places are if the person can only travel straight horizontally or vertically, as though driving on the streets of Manhattan. In our case, the Manhattan distance is the sum of the absolute values of the differences in their coordinates; in other words, the difference in x plus the difference in y between the points.

```
public class Point {  
    private int x;  
    private int y;  
  
    // // your code goes here  
  
}
```

Type your solution here:

```
1 public int manhattanDistance(Point other) {  
2     return Math.abs( (Math.abs(x) - Math.abs(other.x)) + (Math.abs(y) - 1  
3  
4 }
```

This is a **partial class problem**. Submit code that will become part of an existing Java class as described. You do not need to write the complete class, just the portion described in the problem.

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 **You passed 4 of 4 tests.**

[Go to the next problem: isVerticalPoint](#)

test #1: (5, 2) to (8, 6)

console output: 7

result:  pass

test #2: (8, 6) to (5, 2)

console output: 7

result:  pass

test #3: (-15, 39) to (-204, 78), 2x

console output: (-15, 39) to (-204, 78): 228
(-15, 39) to (-204, 78) second try: 228
(-204, 78) to (-15, 39): 228

result:  pass

test #4: Point to itself

console output: (5, 3) to (5, 3): 0
(5, 3) to (5, 3) second try: 0
(8, 6) to (8, 6): 0
(8, 6) to (8, 6) second try: 0

result:  pass

If you do not understand how to solve a problem or why your solution doesn't work, please contact your TA or instructor.

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