

Name:

Date:

Class:

Teacher Script

In Part 1, you will need to model how horizontal movement affects only the x-value and vertical movement affects only the y-value. To help, the following script and actions provide one way to introduce the concepts:

Teacher: "Watch what happens when I move along the x-axis. Remember, when we move left or right, only the x-value changes. The y-value stays the same."

Demonstration 1: Plot and point to (1, 3).

Teacher: "Our point is at (1, 3)."

Move right to (3, 3).

Teacher: "I moved right, so the x-value changed from 1 to 3, but the y-value stayed 3."

Move right again to (5, 3).

Teacher: "I moved right again. Now the point is (5, 3). The x-value changed, but the y-value is still 3."

Teacher: "What pattern do you notice? Every time I move left or right, only the x-value changes."

Teacher: "Now let's look at movement along the y-axis. When we move up or down, only the y-value changes. The x-value stays the same."

Demonstration 2: Plot and point to (4, 1).

Teacher: "Our point is at (4, 1)."

Move up to (4, 3).

Teacher: "I moved up, so the y-value changed from 1 to 3, but the x-value stayed 4."

Move up again to (4, 5).

Teacher: "I moved up again. Now the point is (4, 5). The y-value changed, but the x-value is still 4."

Teacher: "What pattern do Teacher notice? Every time I move up or down, only the y-value changes."

Teacher: "So remember: left and right change the x-value, and up and down change the y-value."