Name(s):

Use this activity document to guide your work in the Random Tutorial: <http://aka.ms/RandomTutorial>.

1. Consider this line of code:

x := math->random range(-3, 4)

What are the possible values of x?

1. If you were trying to simulate the rolling of a six-sided die, what values could you replace the question marks with in this code?

roll := math->random range(?, ?)

Are the values you chose the only possible values you could use? Why or why not?

1. Suppose that you create a game board that is 500 pixels wide and 300 pixels tall.
2. Complete the code below by placing numbers in the blank spaces to select a random point (x, y) that could be any place on the board.

x := math->random range(\_\_\_\_, \_\_\_)

y := math->random range(\_\_\_\_,\_\_\_\_)

1. Complete the code below so that the sprite that is 200 pixels wide and 100 pixels tall will be placed at a random point (x, y) on the board AND so that no part of the sprite is ever off the board.

x := math->random range(\_\_\_\_, \_\_\_)

y := math->random range(\_\_\_\_,\_\_\_\_)

1. Analyze the following code:

**var** x := math -> random range( -1, 1)

**if** x = -1 **then**

    ▷ show(✿ rock)

**else** do nothing **end** if

**if** x = 0 **then**

   ▷ show(✿ paper)

**else** do nothing **end** if

**if** x = 1 **then**

   ▷ show(✿ scissors)

**else** do nothing **end** if

Describe in your own words what you think the script does.