

GRAPHING EXPLORATION 1

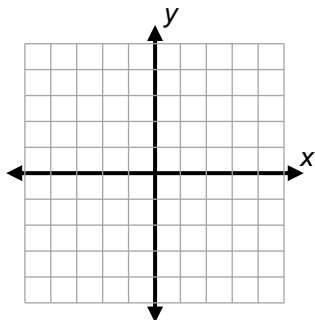
Go to [desmos.com](https://www.desmos.com) and click “start graphing” to access the graphing calculator. Graph each set of functions, sketch the graphs, and answer the questions.

Set 1

$y = 2x$

$y = 2x + 1$

$y = 2x - 3$



How are Set 1 lines the same?

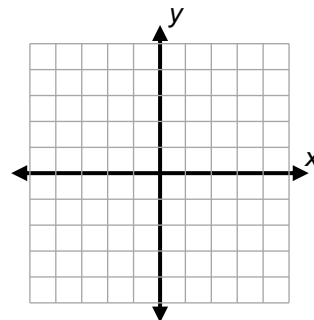
Different?

Set 2

$y = -3x$

$y = -3x + 2$

$y = -3x - 1$



How are Set 2 lines the same?

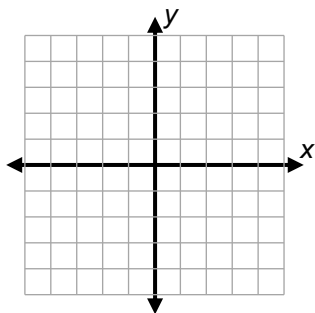
Different?

Set 3

$y = 3x + 1$

$y = x + 1$

$y = \frac{1}{2}x + 1$



How are Set 3 lines the same?

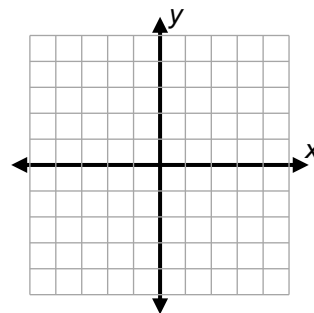
Different?

Set 4

$y = -3x - 1$

$y = -x - 1$

$y = -\frac{1}{3}x - 1$



How are Set 4 lines the same?

Different?