

Graphing Continuous Patterns

Because writing equations using x's and y's are **continuous**, when you graph them you will join all the points with a **line** and put **arrows** on both sides of the line, indicating the line goes in both directions forever.

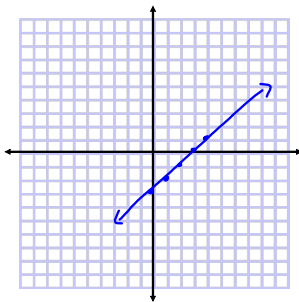
Write a continuous equation and graph the following sequence.

0	x	1	2	3	4
-3	y	-2	-1	0	1

Continuous Equation:

$$y = |x - 3|$$

- (1, -2)
- (2, -1)
- (3, 0)
- (4, 1)



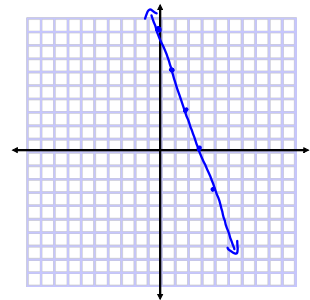
Write a continuous equation and graph the following sequence.

0	x	1	2	3	4
9	y	6	3	0	-3

Continuous Equation:

$$y = -3x + 9$$

- (0, 9)
- (1, 6)
- (2, 3)
- (3, 0)
- (4, -3)



Graphing from a continuous equation

$$y = 3x - 1$$

	$y = 3(1) - 1$	$y = 3(2) - 1$	$y = 3(3) - 1$
	$y = 3 - 1$	$y = 6 - 1$	$y = 9 - 1$
	$y = 2$	$y = 5$	$y = 8$
x	y		
1	2		
2	5		
3	8		

