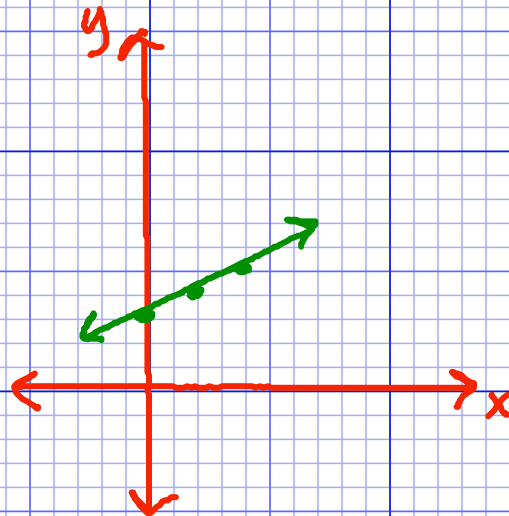


## Graphing Linear Equations

linear equation - an equation for which the graph is a straight line

①  $y = \frac{1}{2}x + 3$  slope

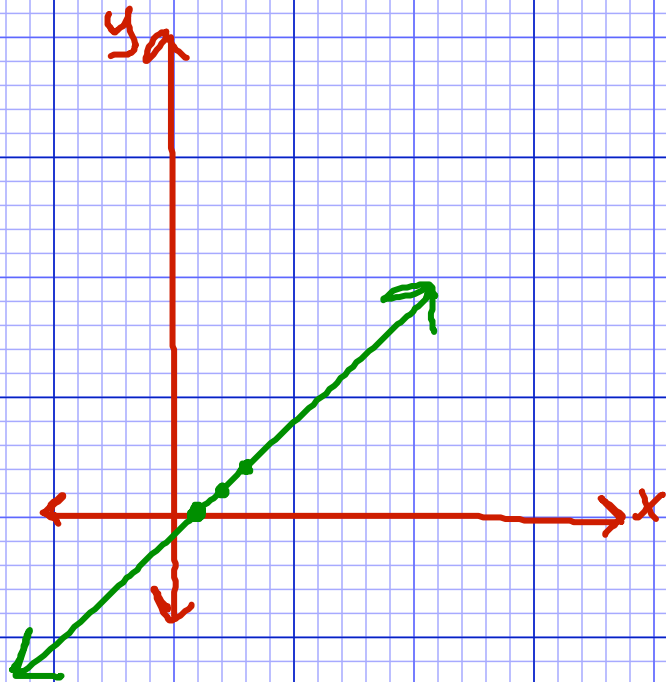
x	$\frac{1}{2}x + 3$	y
0	$\frac{1}{2}(0) + 3$ $0 + 3$	3 (0,3)
2	$\frac{1}{2}(2) + 3$ $1 + 3$	4 (2,4)
4	$\frac{1}{2}(4) + 3$ $2 + 3$	5 (4,5)



Slope =  $\frac{\text{rise}}{\text{run}} = \frac{2}{4} = \frac{1}{2}$

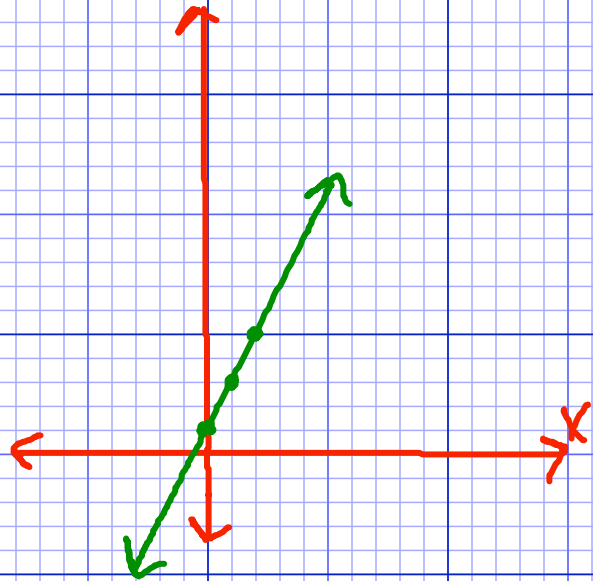
③  $y = |x - 1|$

x	x-1	y
1	1-1	0 (1,0)
2	2-1	1 (2,1)
3	3-1	2 (3,2)



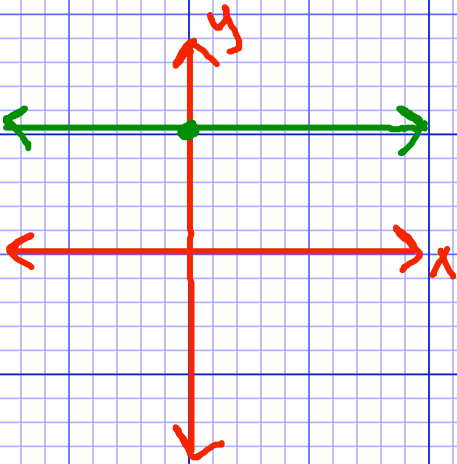
④  $y = 2x + 1$

x	$2x + 1$	y
0	$2(0) + 1$ $0 + 1$	1 (0, 1)
1	$2(1) + 1$ $2 + 1$	3 (1, 3)
2	$2(2) + 1$ $4 + 1$	5 (2, 5)



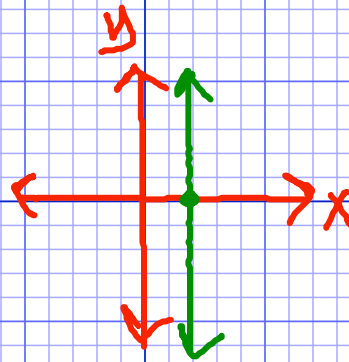
⑪

$$y = 5$$



⑫

$$x = 2$$



1 pen	2 pens	3 pens	4 pens
0.50	1	1.5	2
(1, 0.5)	(2, 1)	(3, 1.5)	(4, 2)

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