Graphing Linear Equations

A simple way to graph linear equations is to find any two points that satisfy the equation and then draw a straight line through them.

Consider these sets of similar linear equations:

Example 1: $y = x$, $y = 2x$, $y = 3x$, $y = 4x$

Solution:

$y = x$	
x	y
0	0
1	1

$y = 2x$	
x	y
0	0
1	2

$y = 3x$	
x	y
0	0
1	3

$y = 4x$	
x	y
0	0
1	4
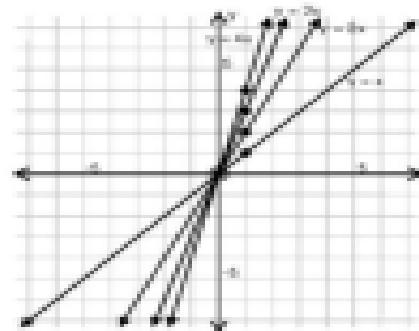
Example 2: $y = x$, $y = x + 1$, $y = x + 2$, $y = x + 3$

Solution:

$y = x$	
x	y
0	0
1	1

$y = x + 1$	
x	y
0	1
1	2

$y = x + 2$	
x	y
0	2
1	3

$y = x + 3$	
x	y
0	3
1	4
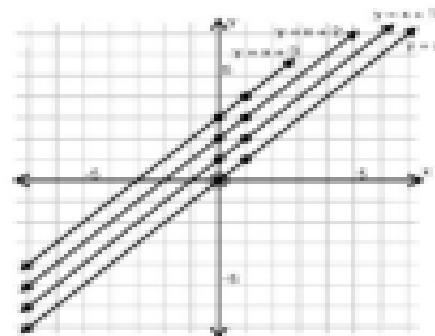
Note that these lines are all parallel.

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