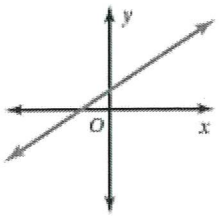
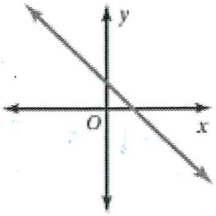
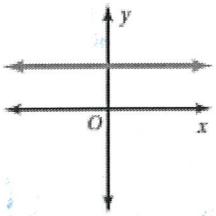
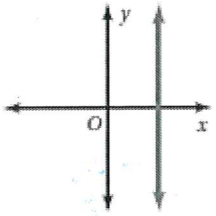
Graphing Proportional Relationships Using Slope Notes

Recall:

Slope

Positive Slope	*Negative Slope*	*Slope of 0*	*Undefined Slope*
			
The line rises from left to right.	The line falls from left to right.	The line is horizontal.	The line is vertical.

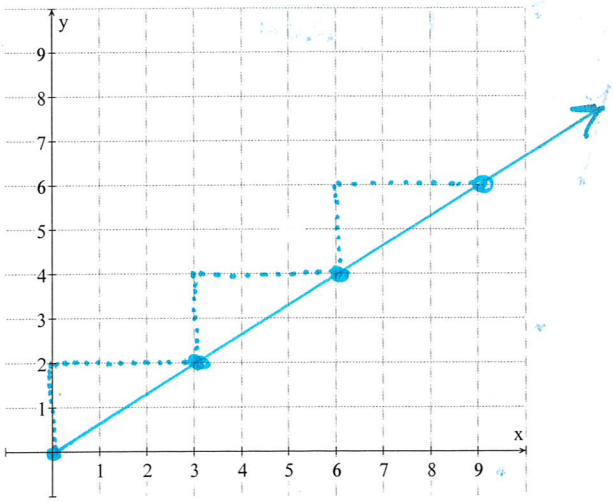
The idea we're going to use when graphing lines is the idea that: Slope = $\frac{rise}{run}$

Graph the following using the rise and run.

Ex:)

$y = \frac{2}{3}x$

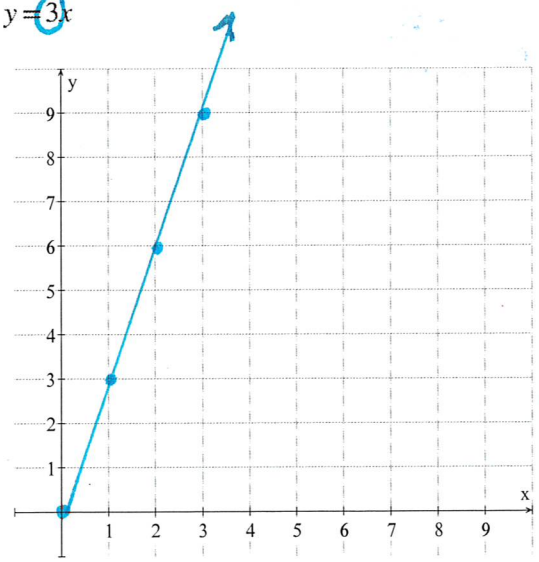
$\frac{2}{3} = \frac{\text{rise}}{\text{run}}$



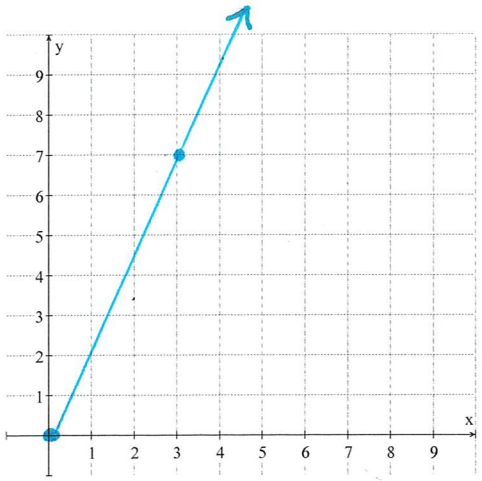
Ex:)

$y = 3x$

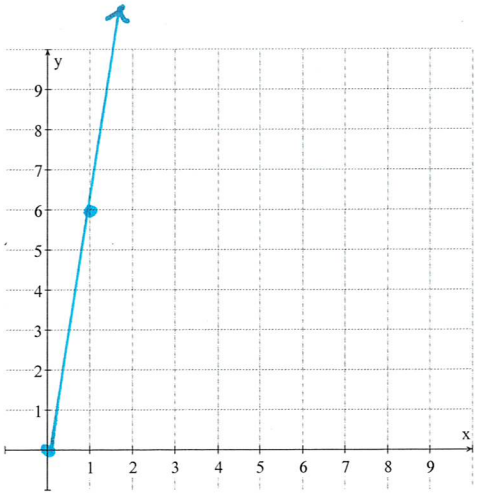
$3 = \frac{3}{1} = \frac{\text{RISE}}{\text{RUN}}$



OYO:) $y = \frac{7}{3}x$ → $\frac{7}{3} = \frac{\text{RISE}}{\text{RUN}}$

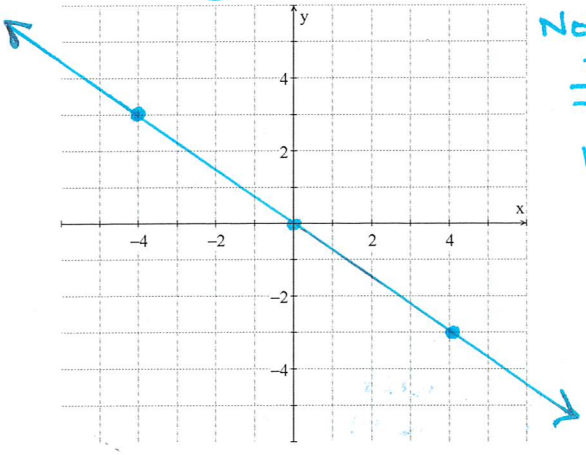


OYO:) $y = 6x$ → $6 = \frac{6}{1}$



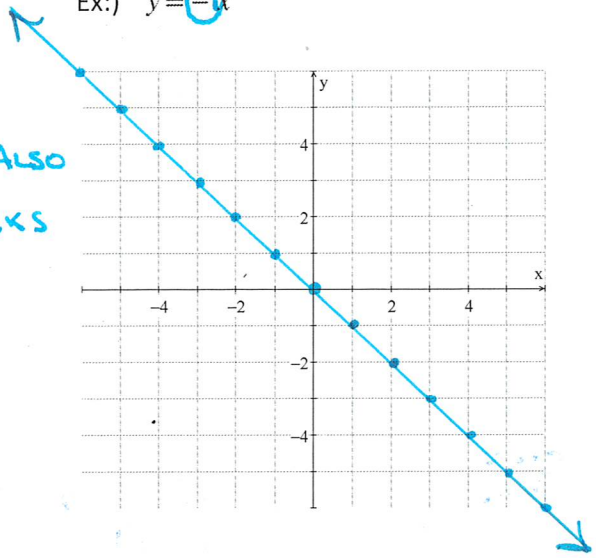
Graph the following using the rise and run.

Ex:) $y = -\frac{3}{4}x$ → $-\frac{3}{4} = \frac{-3}{4}$

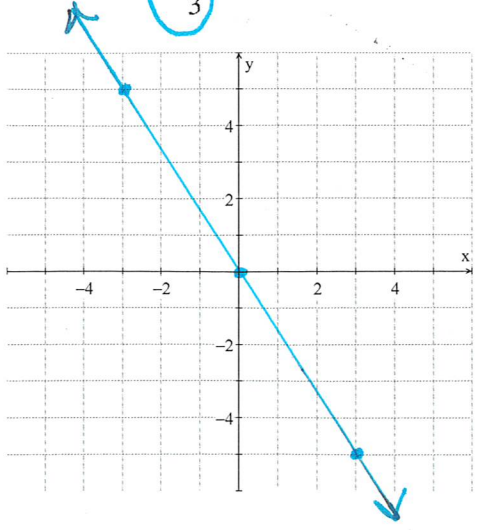


NOTE: $\frac{3}{-4}$ ALSO WORKS

Ex:) $y = -1x$ → $-1 = \frac{-1}{1}$



OYO:) $y = -\frac{5}{3}x$ → $\frac{-5}{3}$



OYO:) $y = -4x$ → $\frac{-4}{1} = \frac{\text{RISE}}{\text{RUN}}$