On Graph Paper

# fun w/ Slope

**Nov. 15, 2006**

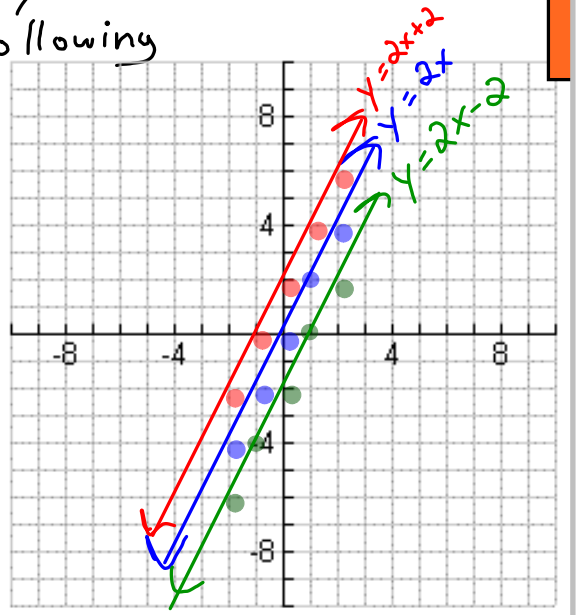
Make a x-y axis that is 10 x10

Graph the following

$y = 2x$

$y = 2x + 2$

$y = 2x - 2$



For Each Equation give the Slope and the point where it crosses the y-axis

| | Slope | y-int |
|---|---|---|
| Blue $y=2x$ | $m=\frac{2}{1}=2$ | $(0,0)$ |
| Red $y=2x+2$ | $m=\frac{2}{1}=2$ | $(0,2)$ |
| Green $y=2x-2$ | $m=\frac{2}{1}=2$ | $(0,-2)$ |

$$m = \text{slope} = \frac{\text{rise}}{\text{run}} = \frac{\text{change in } y}{\text{change in } x} = \frac{y_2 - y_1}{x_2 - x_1}$$

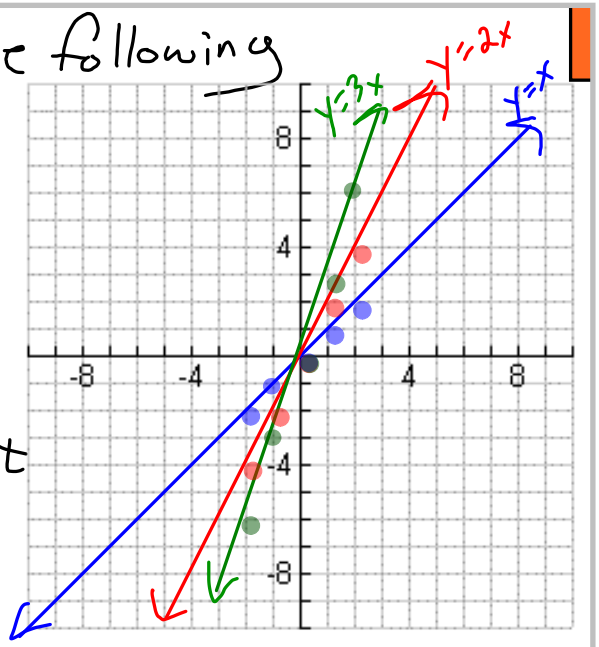
Graph the following

$y = x$

$y = 2x$

$y = 3x$

Slope & y-int



For Each Equation give the Slope and the point where it crosses the y-axis

| | Slope | y-int |
|---|---|---|
| Blue $y=x$ | $m=\frac{1}{1}=1$ | $(0,0)$ |
| Red $y=2x$ | $m=\frac{2}{1}=2$ | $(0,0)$ |
| Green $y=3x$ | $m=\frac{3}{1}=3$ | $(0,0)$ |

$$m=\text{slope}=\frac{\text{rise}}{\text{run}}=\frac{\text{change in } y}{\text{change in } x}=\frac{y_2-y_1}{x_2-x_1}$$

Conclusion...

the # multiplied by x is the slope

the extra term is the y-int.

# O.T.L.

① pg 242: at the Bottom
The "Think about it:"
#1-5 will be turned
in for a grade.
Complete Sentence Answers