

5.3 notes.notebook

Alg 1 5.3 notes

Slope-Intercept Form

The slope-intercept form of a linear equation of a nonvertical line is $y = mx + b$.

slope m y-intercept b

Think about it...
Why would slope-intercept form *not* work for vertical lines?

Example: $y = -3x + 17$

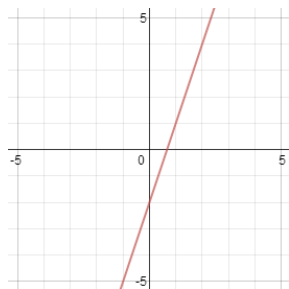
slope is -3 y-intercept is 17

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It is possible to find equations of a line by simply looking at the graph and finding the key info.

Find the equation in slope-intercept form of the graphed line.

5)



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1) Find the slope and the y-intercept for the graph $y = 2x - 5$.

2) Write the equation for the line that has a slope of $-1/2$ and y-intercept at 4.

On your own...

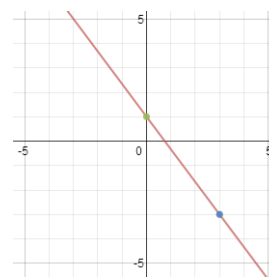
3) Find the slope and the y-intercept for the graph $y = 5x + 2$.

4) Write the equation for the line that has a slope of 7 and y-intercept at 0.

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Find the equation in slope-intercept form of the graphed line.

6)

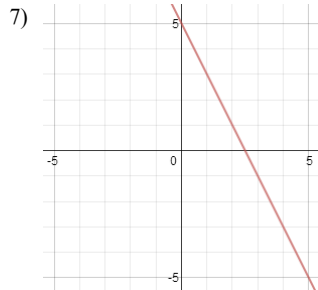


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Find the equation in slope-intercept form of the graphed line.

On your own...



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It is possible to find equations of a line if given two points on that line.

Find the equation in slope-intercept form for the line that passes through the given points.

8) (0, 5) and (3, 7)

9) (-1, 3) and (2, -3)

On your own...

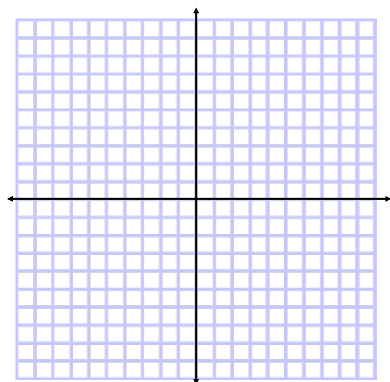
10) (4, -5) and (15, -27)

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Graph each equation.

11) $y = -\frac{3}{2}x + 2$

12) $y = 5x$



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On your own...

Graph each equation.

13) $y = \frac{1}{2}x - 4$

