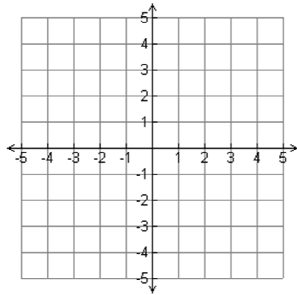


5.1 Write Linear Equations in Slope-Intercept Form

Recall that the graph of an equation in slope-intercept form, $y = mx + b$, is a line with a slope of m and a y -intercept of b . You can use this form to write an equation of a line if you know its slope and y -intercept.



Your Turn !

Skill #1

Write an equation of the line with the given slope and y -intercept.

Slope is $\frac{3}{4}$; y -intercept is -3 .

Don't forget to show your work and write down your answer !

Skill #1: Write an equation of the line given a slope and a y -intercept.

EXAMPLE 1 Use slope and y -intercept to write an equation

Write an equation of the line with a slope of -2 and a y -intercept of 5 .

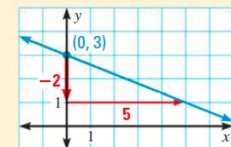
Skill #2: Write an equation of the line given a graph with a clear slope and a y -intercept.

EXAMPLE 2 Standardized Test Practice

Which equation represents the line shown?

(A) $y = -\frac{2}{5}x + 3$ (B) $y = -\frac{5}{2}x + 3$

(C) $y = -\frac{2}{5}x + 1$ (D) $y = 3x + \frac{2}{5}$

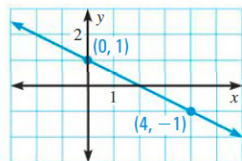


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Your Turn !

You Try: Skill #2

Write an equation of the line shown.



Don't forget to show your work and write
down your answer !

Your Turn !

You Try: Skill #3

Write an equation of the line that passes through the given points.

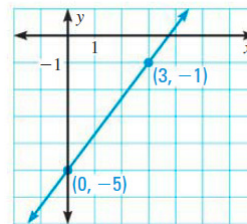
$$(2, -4), (0, -4)$$

Don't forget to show your work and write
down your answer !

Skill #3: Write an equation of the line given two points with one of them being a y-intercept.

EXAMPLE 3 Write an equation of a line given two points

Write an equation of the line shown.



Skill #4: Write an equation of the line given two points in function notation with one of them being a y-intercept.

EXAMPLE 4 Write a linear function

Write an equation for the linear function f with the values $f(0) = 5$ and $f(4) = 17$.

5.1 Blank Notes_Medium

September 12, 2012

Your Turn !

You Try: Skill #4

Write an equation for the linear function f with the given values.

$$f(-3) = 6, f(0) = 5$$

Don't forget to show your work and write down your answer !

Skill #5: Apply concept of rate and initial condition in a word problem to an equation.

We will come back to work with word problems !

Please Don't Forget to Enter Your Answers for the "You Try" examples in the form below!