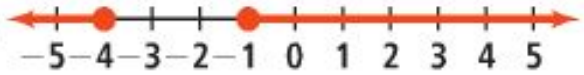
76. Which equation represents the line that has slope 5 and passes through the point $(0, -2)$?

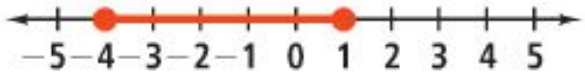
(A) $y = x - 2$ (B) $y = 5x - 2$ (C) $y = -2x - 5$ (D) $y = 5x$

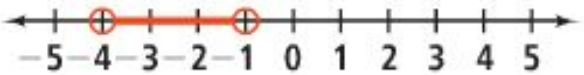
77. What is the slope of the line that passes through the points $(-5, 3)$ and $(1, 7)$?

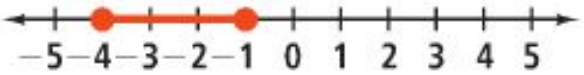
(F) $-\frac{5}{3}$ (G) $-\frac{2}{3}$ (H) $\frac{2}{3}$ (I) $\frac{3}{2}$

78. Which number line shows the solution of $|2x + 5| \leq 3$?

(A)


(B)


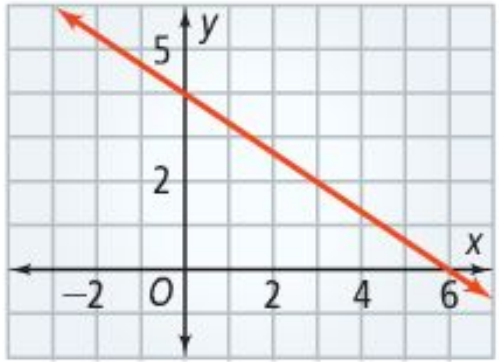
(C)


(D)


79. Which equation represents the graph at the right?

(F) $y = -\frac{3}{2}x + 4$ (H) $y = -\frac{2}{3}x + 4$

(G) $y = -4x + \frac{3}{2}$ (I) $y = 4x - \frac{2}{3}$



80. If a, b, and c are real numbers, $a \neq 0$, and $b > c$, is the statement $ab > ac$ *always, sometimes,* or *never* true? Explain.

Homework Check - Standard Form

I’ll take any questions you have!

Any students need to take Friday’s quiz?

Students who did not take the quiz yesterday need to take it at this time

Announcements

- Unit 5
  - ~~Slope~~
  - ~~Direct Variation~~
  - ~~Slope Intercept Form~~
  - ~~Standard Form (Substitute)~~
  - Point Slope Form
  - Using all three forms interchangeably
  - Review Day
  - Test on Thursday, 11/8
- Introduce “Mathematicians Are Like Me” project on Friday

Really quick review of Standard Form and Slope Intercept Form...

Point Slope Form

11/5/2018

Create Point Slope Form Foldable

Point Slope Form

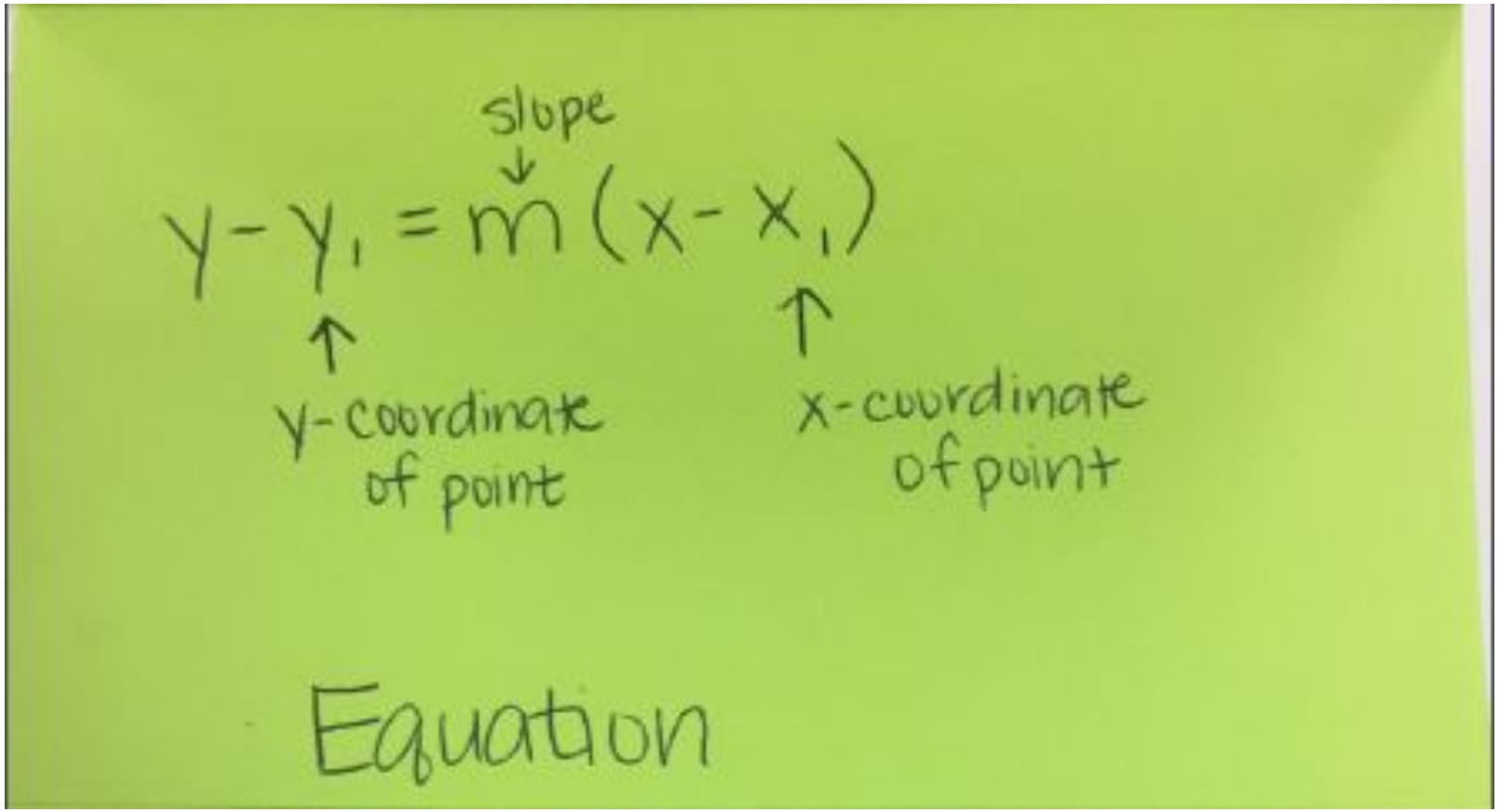
Equation

Write Equation (Given Point and Slope)

Write Equation (Given Two Points)

Write Equation (Given a Table)

Graph Equation (from point-slope form)


slope
$y - y_1 = m(x - x_1)$
y-coordinate of point
x-coordinate of point
Equation

Example:
Write the equation of the line that has a slope of -4 and passes through the point (2, -3)

Write Equation (Given Point and Slope)

Example:

Write the equation of the line that passes through the points (2, -3) and (4, 7).

Write Equation (Given Two Points)

Example:

What is the equation in point slope form and slope-intercept form for this table?

X	Y
10	640
30	590
70	490
90	440

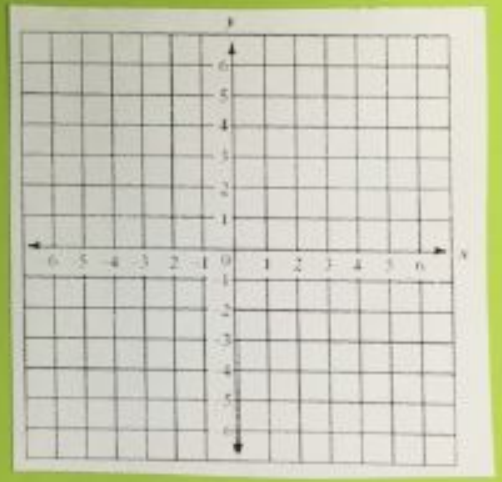
1. Use two points to find slope.
2. Choose one ordered pair to plug into point-slope form and plug in slope.
3. Change to slope-intercept form.

Write Equation (Given a Table)

What is the graph of the equation $y-1=\frac{2}{3}(x-2)$?

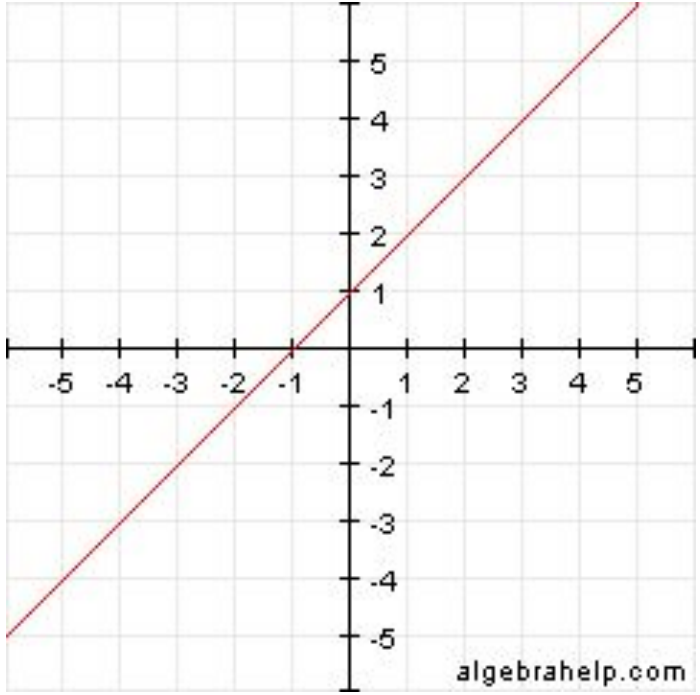
*The equation is in point-slope form $y-y_1=m(x-x_1)$. Find the slope and point from this equation.

1. Graph point
2. Use the slope to plot additional points.
3. Draw line



Graph Equation (from point-slope form)

Write an equation of the line in point slope form



Write the equation of the line that has a slope of 5 and passes through (-1, 5).

Write the equation of the line that has a slope of -1/3 and passes through (4,-7).

Write the equation of the line that passes through (1, 4) and (-2, 3).

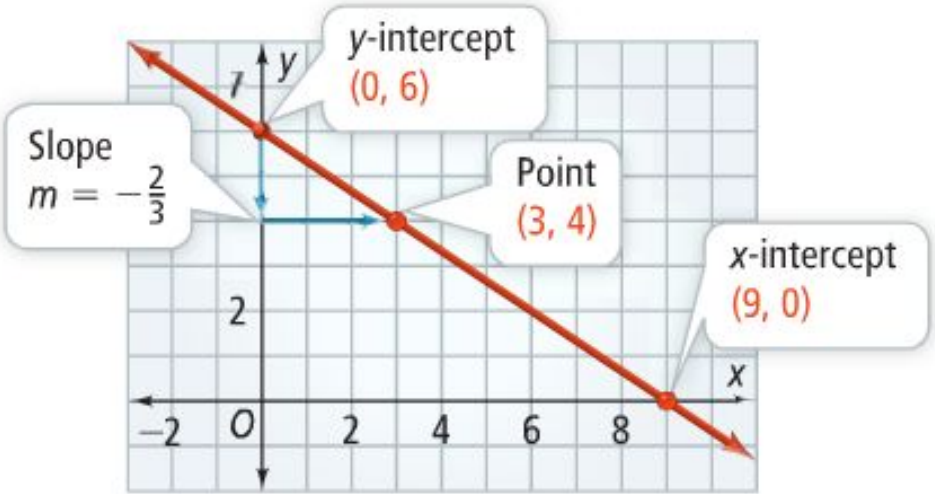
Write the equation of the line that passes through (-2, 0) and (4, 1).

take note

Concept Summary Linear Equations

You can describe any line using one or more of these forms of a linear equation. Any two equations for the same line are equivalent.

Graph



Forms

Slope-Intercept Form

$y = mx + b$

$y = -\frac{2}{3}x + 6$

Point-Slope Form

$y - y_1 = m(x - x_1)$

$y - 4 = -\frac{2}{3}(x - 3)$

Standard Form

$Ax + By = C$

$2x + 3y = 18$

HomeworK

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