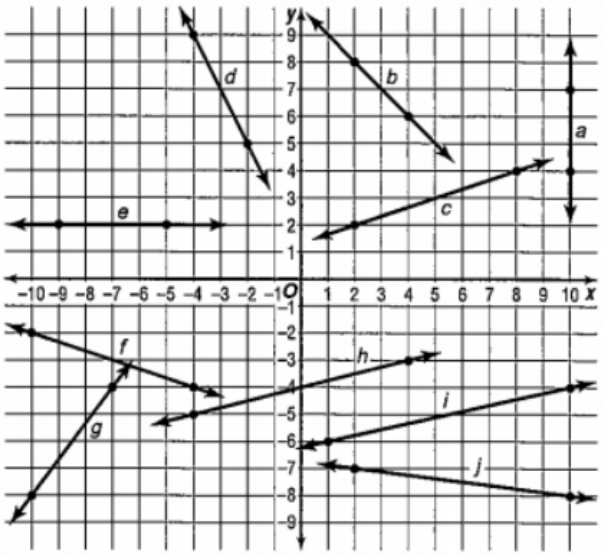
Welcome! Please get your ISN and warmup and have a seat. Remember to turn in your homework!!

Determine the slope of each line.

you do not have to draw this!

1. a
2. b
3. c
4. d
5. e
6. f



Sep 8-8:09 AM

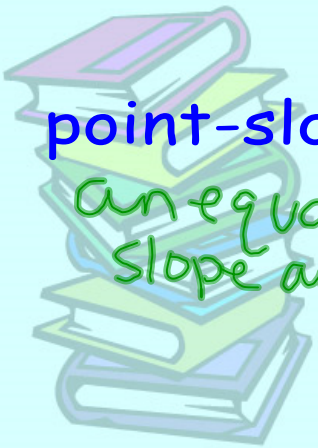
Welcome! Please get your ISN and complete the warmup video in the Google classroom! Remember to turn in your homework!!

Sep 14-9:03 AM

WWK

slope- intercept form- $y = mx + b$

an equation of a line that shows slope and y-intercept.



point-slope form- $y - y_1 = m(x - x_1)$

an equation of a line that shows the slope and a point on that line.

Sep 10-9:10 AM

TOC 25-26 point-slope form

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

Give down

Give down

Give down

Sep 8-8:15 AM

TOC 25-26 point-slope form

y		y_1		m	$(x$		$x_1)$
DO NOT PLUG IN HERE!	—	plug in the y from the point you are given.	=	plug in the slope you are given	DO NOT PLUG IN HERE	—	plug in the x from the point you are given.

Sep 8-8:18 AM

Point-Slope form 26

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

When Given slope and 1 point...

Write the equation of the line w/ slope = 3 through (2,4).

When Given 2 Points...

Sep 10-9:28 AM

TOC 23-24 slope-intercept and point-slope

Write the equation of a line with slope = 3 that passes through $(\overset{x_1}{2},\overset{y_1}{4})$

When Given slope and 1 point...

work

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

$y - 4 = 3(x - 2)$

$y - 4 = 3x - 6$

$+4 \quad +4$

$y = 3x - 2$

steps

1. Plug in m, x_1, y_1.
2. Distribute
3. Get y by itself.

Sep 8-8:19 AM

TOC 23-24 slope-intercept and point-slope

Write the equation of a line through $(\overset{x_1}{1},\overset{y_1}{-3})$ and $(\overset{x_2}{4},\overset{y_2}{5})$

When Given 2 Points...

work

$\frac{y_2 - y_1}{x_2 - x_1} = \frac{5+3}{4-1} = \frac{8}{3} = m$

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

$y + 3 = \frac{8}{3}(x - 1)$

$y + 3 = \frac{8}{3}x - \frac{8}{3}$

$-3 \quad -3$

$y = \frac{8}{3}x - \frac{17}{3}$

steps

1. Find slope
2. Plug in m, x_1, y_1.
3. Distribute
4. Get y by itself

Sep 9-7:50 AM

Ex1 (pg 23) Write the equation of a line with:

a) slope = 1/2 that passes through (6, -2)

b) slope = -4 through the origin

Sep 9-7:54 AM

Homework

Write an equation in point-slope form of the line that passes through the given point and has the given slope.

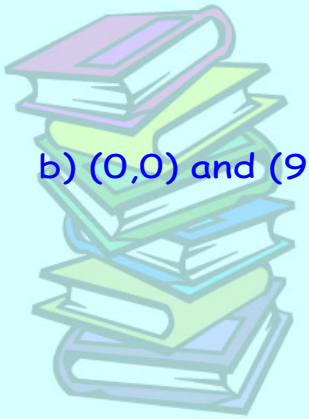
1. (2, 7); m = -4
2. (12, 5); m = -3
3. (4, -5); m = 6
5. (7, -6); m = $\frac{1}{2}$
4. (-6, -2); m = 3
6. (-8, 2); m = $-\frac{3}{4}$

Sep 9-7:56 AM

Welcome! Your warmup today is IN YOUR ISN!!! Remember to turn in your homework!

Ex2 (pg 23) Write the equation of a line through:

a) (7, 4) and (-3, -1)



b) (0,0) and (9, -3)

Sep 9-7:55 AM