Algebra 1 4.2

Write an equation of a a line given a slope and a point

Write an equation of a line given two points

slope
y-intercept
linear equation
slope-intercept form
constraints
linear extrapolation
activity: ICE

$y = mx + B$

$y = 3x + 1$

whiteboards

Slope $= \frac{1}{2}$ $\quad (4, 2)$

$y = \frac{1}{2}x + B$

$2 = \frac{1}{2} \cdot 4 + B$

$2 = 2 + B$

$-2 \quad -2$

$0 = B$

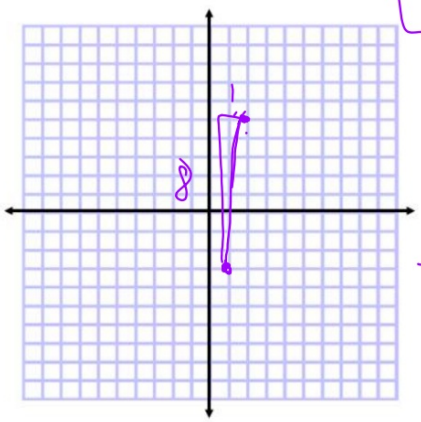
$y = \frac{1}{2}x + 0$

$y = \frac{1}{2}x$

$(2, 5)$ $(1, -3)$ $y = 8x + -11$

$m = 8$

$y = mx + B$



$5 = 8 \cdot 2 + B$

$5 = 16 + B$

$-16 \quad -16$

$-11 = B$