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## 5.3: Write Linear Equations In Point-Slope Form

Goals: *Write an equation of a line in point-slope form given a point and slope
*Graph an equation of a line written in point-slope form
*Write an equation of a line given two points

## Point-Slope Form:

## Write an equation in point-slope form given a point and the slope:

Ex: $(4,-3), m=2$
Ex: $(-1,4), m=-2$

## Ex: $(-3,1), m=3$

Ex: $\quad(3,7), m=-1$

Graph an equation in point-slope form:
Ex: $y+2=\frac{2}{3}(x-3)$
Ex: $y-1=-(x-2)$



Ex: $y-2=\frac{1}{2}(x+2)$


Ex: $y+4=-2(x+2)$


Write the equation of the line in point-slope form given two points:
Ex: $\quad(-1,3),(1,1)$
Ex: $(-2,3),(1,-3)$

Ex: $(2,3),(4,4)$

