

Lines: Lesson 4

Slope Intercept and Point-Slope Form: Notes

Name: _____



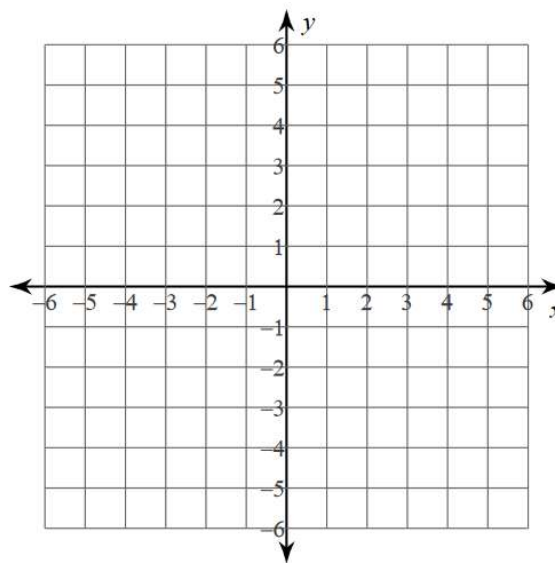
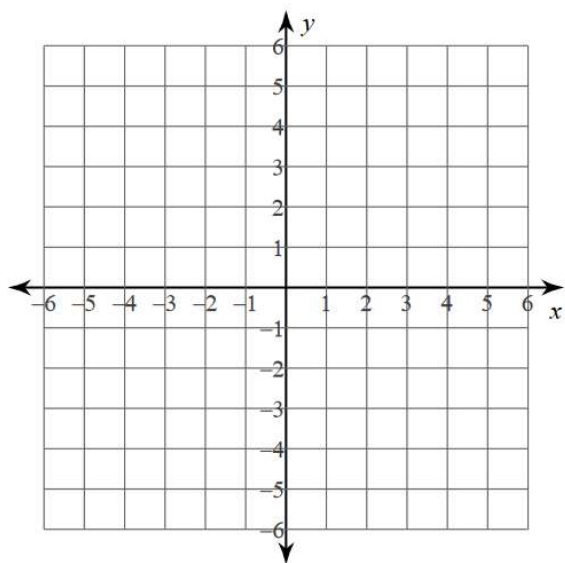
Slope Intercept Form:

$$y = mx + b$$

Graph the following equations:

$$y = -2x + 1.5$$

$$y = \frac{4}{5}x$$



Point-Slope Form: $y - y_1 = m(x - x_1)$

What is the Point-Slope form of the line through $(-2, 6)$ with a slope of -4 ?

$$y - y_1 = m(x - x_1) = \underline{\hspace{10em}}$$

simplified: _____

What is a point and slope of the line with the equation $y+10=\frac{2}{7}(x-9)$?

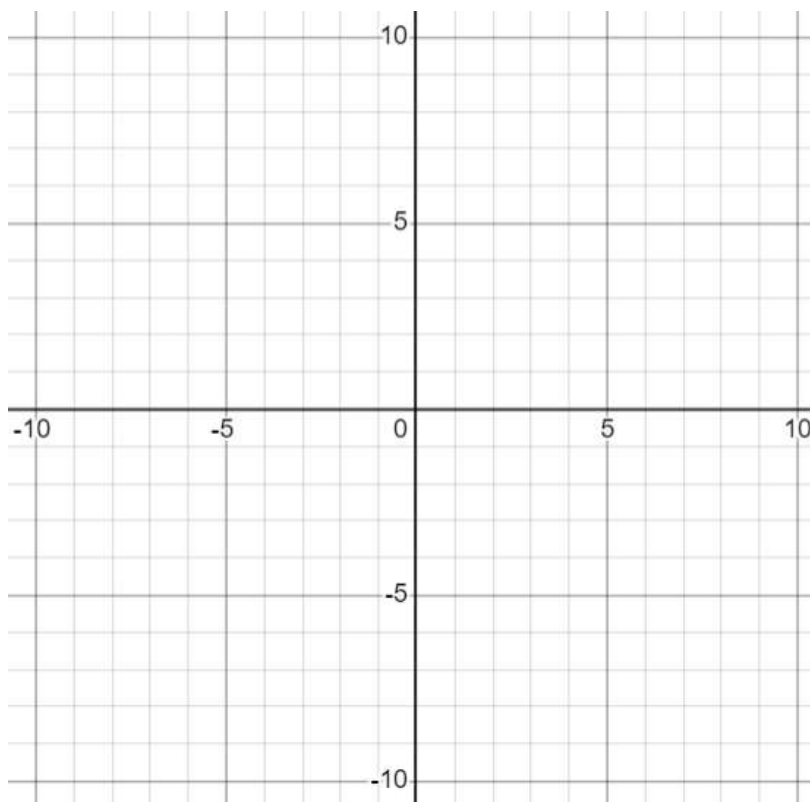
Point: _____ Slope: _____

What is the Slope Intercept form of a line with a slope of -1 through the point (-5, -4)?

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

_____ Put in values we know.
_____ Simplify.
_____ Distribute slope.
_____ Move the number away from y.

Graph $y=-x-9$



Does it go through (-5, -4) with a slope of -1? _____