

Name: _____

Date: _____

Learning Goal 6.3

Ability to move between all forms of the equation.

Equation of a Line	
Slope-Intercept Form	Slope-Point Form
General Form	Standard Form
Slope	

Warmup Classify each equation as being in the form:

- Slope-Intercept,
- General,
- Slope-Point form,
- Standard, or
- If the equation is none of these write "none."

$2x + 7y + 9 = 0$	$y - 9 = \frac{4}{5}(x + 2)$	$3x + \frac{8}{7}y - 10 = 0$
$x + 9 = y$	$(y + 3) = 5(x - 7)$	$y = -\frac{4}{5}x^3 - 9$
$y = -\frac{8}{9}x + 13$	$-4y + 3x = 9$	$x + 15 = \frac{3}{4}(y - 9)$

Example Find the equation of a line with slope $-\frac{7}{9}$ and y - intercept of 12.

Example Find the equation of a line with a slope of $\frac{3}{5}$ through the point (2,8).

Example Find the equation of a line through (5, -20) and (40, 50).

Example A line has a slope of -5 and a x -intercept of $\frac{5}{2}$. Find the equation of the line. Write your final equation in slope-intercept form.

Example A line is parallel to the line $2x + 9y - 39 = 0$ and the same y -intercept as $y - 8 = \frac{3}{4}(x - 16)$. Find the equation of the line.

Example Graph all the lines that you found on the previous page.

