Slope Formulas	
Using a Graph	**Using Two Points**
$m = \dfrac{rise}{run}$	$m = \dfrac{y_2 - y_1}{x_2 - x_1}$

Find the slope of the line using the points on the graph.
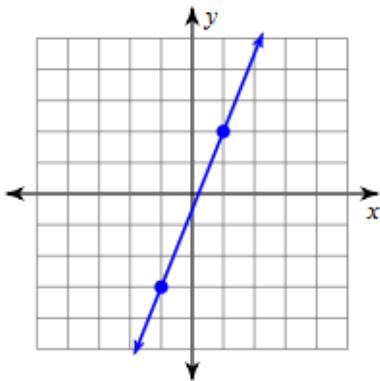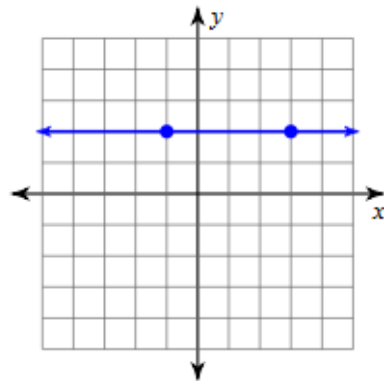
1)
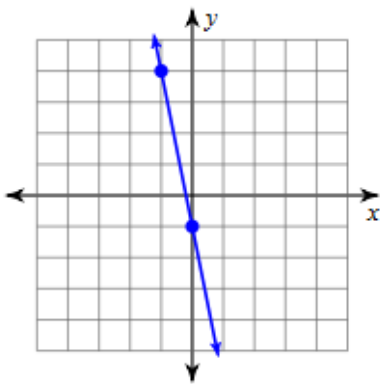
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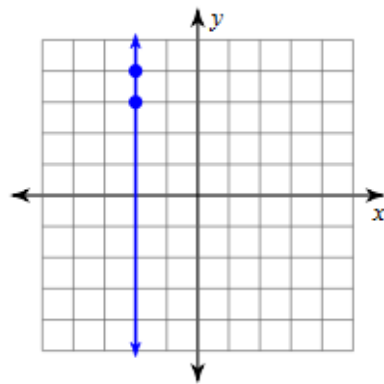
3)

4)

Find the slope of the line that passes through the given points.
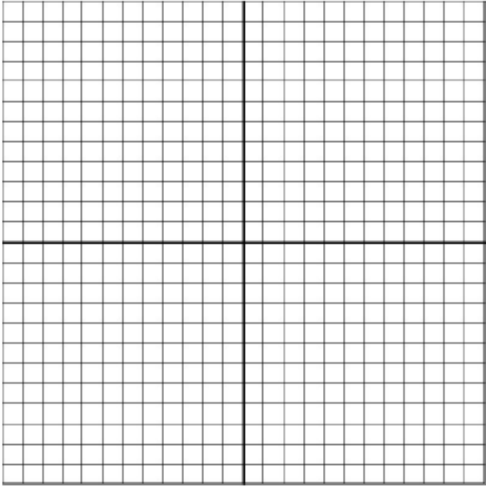
5) $(-14, -8)$ and $(0, -8)$
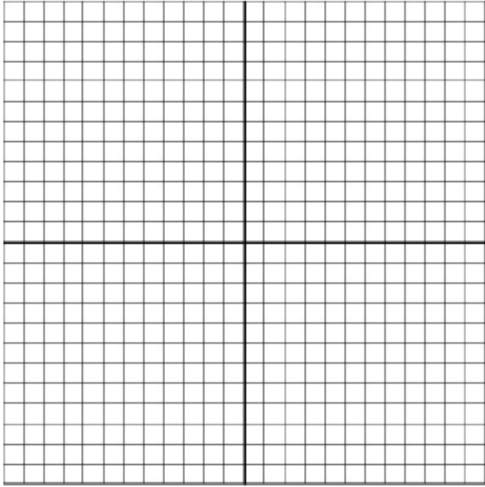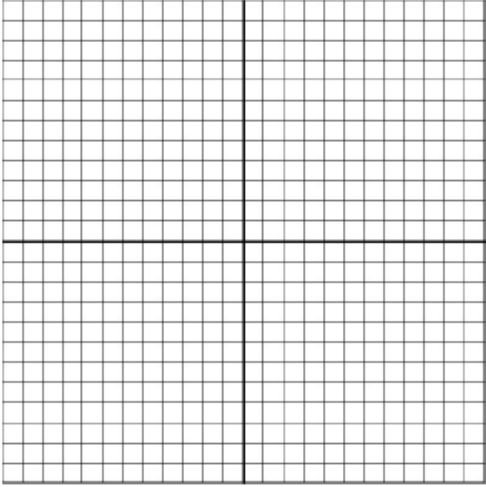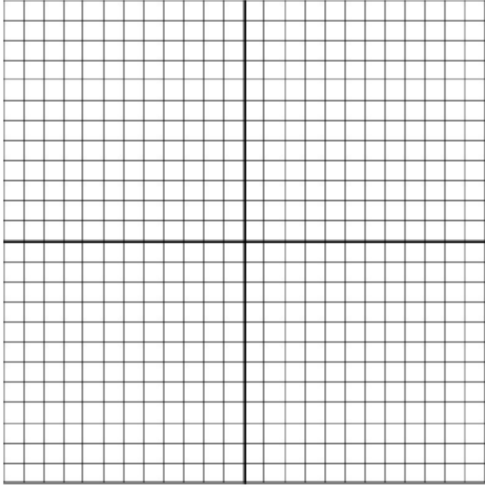
6) $(-4, 14)$ and $(-1, -7)$

7) $(-5, 14)$ and $(-13, -6)$

8) $(15, -20)$ and $(15, -13)$

Types of Linear Equations		
Slope-Intercept Form	**Standard Form**	**Point-Slope Form**
$y = mx + b$ where m is the slope and b is the y-intercept	$Ax + By = C$ where $A, B,$ and C are integers	$y - y_1 = m(x - x_1)$ where m is the slope and (x_1, y_1) is a point on the line

Convert each equation from standard to slope-intercept form. Identify the slope and y-intercept. Then, graph it.
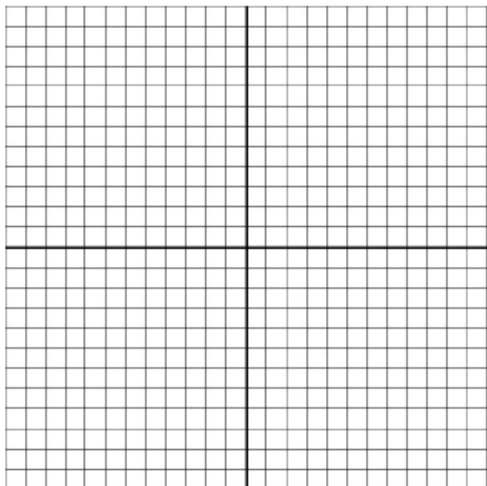
9) $x + 6y = 12$

Slope-Intercept: _____

$m =$ _____ , $b =$ _____

10) $4x - 3y = 0$

Slope-Intercept: _____

$m =$ _____ , $b =$ _____

11) $4x - 5y = -10$

Slope-Intercept: _____

$m =$ _____ , $b =$ _____

12) x-intercept = –1 and y-intercept = –4

Slope-Intercept: _____

$m =$ _____ , $b =$ _____

Convert each equation from point-slope to slope-intercept form. Identify the slope and *y*-intercept. Then, graph it.

13) $y + 1 = -\frac{3}{4}(x - 4)$
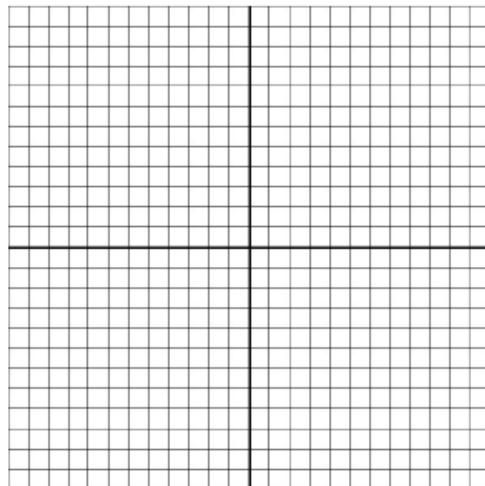
Slope-Intercept: _____

$m =$ _____ , $b =$ _____

14) $y + 3 = \frac{4}{5}(x + 5)$
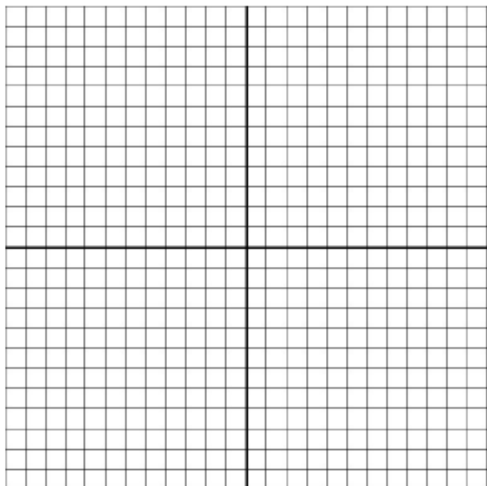
Slope-Intercept: _____

$m =$ _____ , $b =$ _____
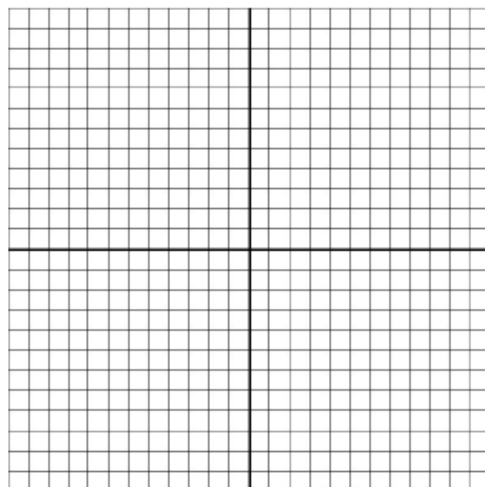
15) $y + 1 = -(x - 3)$

Slope-Intercept: _____

$m =$ _____ , $b =$ _____

16) $y - 3 = -\frac{7}{2}(x + 2)$

Slope-Intercept: _____

$m =$ _____ , $b =$ _____
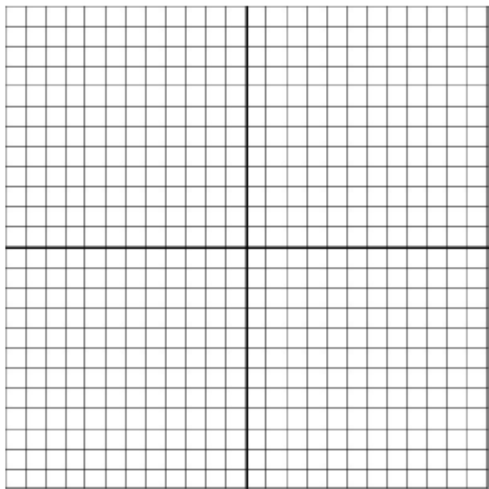
Graph the horizontal and vertical lines.

17) $y = 9$

Circle one: HOY   VUX

$m =$ _____

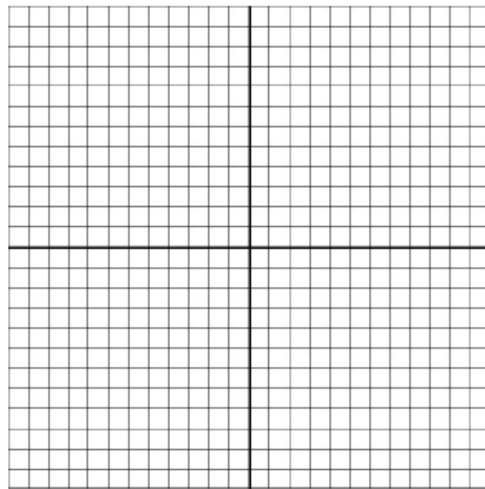18) $x = -7$

Circle one: HOY   VUX
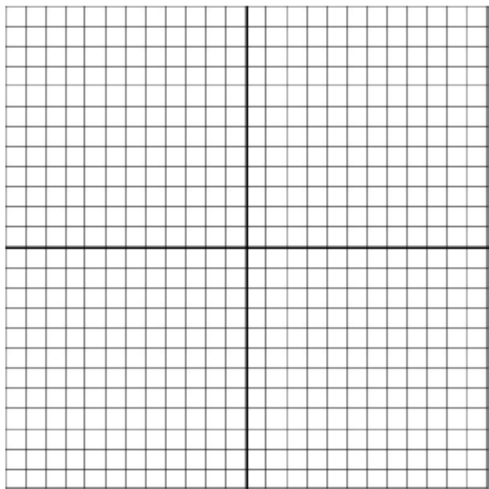
$m =$ _____

19) $-3x = 24$

Circle one: HOY   VUX

$m =$ _____

20) $-2y = -6$

Circle one: HOY   VUX

$m =$ _____