Algebra 1 Bellwork   Thursday, September 18, 2014

Find the slope of the line that connects each pair of points. Where applicable give fractional answers in reduced form.

1. $(10,-3)$ & $(-15,-13)$

2. $(-9,3)$ & $(-9,8)$

3. $(-2,23)$ & $(5,-19)$

4. $(5,2)$ & $(-3,2)$

Linear Equations:

Slope-Intercept Form: Point-Slope Form: Standard Form:

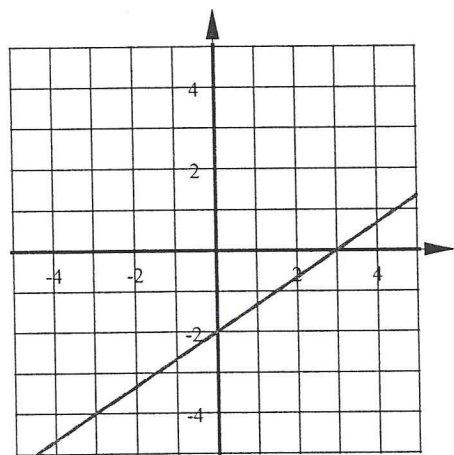$y = mx + b$ $y - y_1 = m(x - x_1)$ $Ax + By = C$

Write the equation of each line in Slope-Intercept Form:

5. The line in the graph below

6. The line that passes through the two points $(2,-7)$ & $(-1,2)$

7. Write the equation of the line that is parallel to $y = -2x + 5$ and passes through the point $(-4,9)$.

1

Algebra 2   Bellwork   Thursday, September 18, 2014

Find the slope of the line that connects each pair of points. Where applicable give fractional answers in reduced form.

1. $(10,-3)$ & $(-15,-13)$

$m = \dfrac{-3 + {}^+13}{10 + {}^+15} = \dfrac{10}{25} = \boxed{\dfrac{2}{5}}$

2. $(-9,3)$ & $(-9,8)$

$\dfrac{8-3}{-9--9} = \dfrac{5}{0}$

$\boxed{m \text{ is undefined}}$

3. $(-2,23)$ & $(5,-19)$

$m = \dfrac{23 - -19}{-2 - 5} = \dfrac{42}{-7} = \boxed{-6}$

4. $(5,2)$ & $(-3,2)$

$\dfrac{2-2}{5--3} = \dfrac{0}{8}$

$\boxed{m = 0}$

Linear Equations:

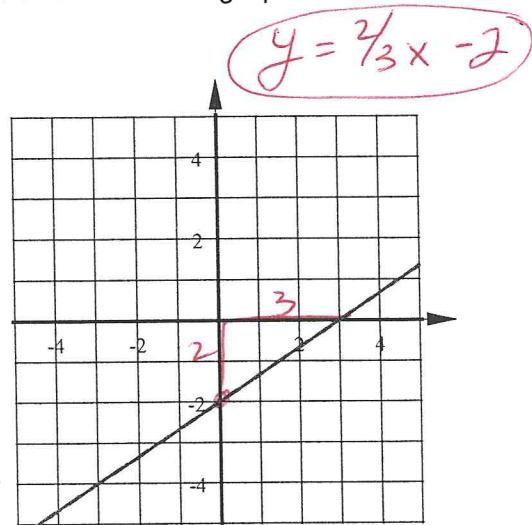| Slope-Intercept Form:	Point-Slope Form:	Standard Form:
$y = mx + b$	$y - y_1 = m(x - x_1)$	$Ax + By = C$

Write the equation of each line in Slope-Intercept Form:

5. The line in the graph below

$\boxed{y = \dfrac{2}{3}x - 2}$

6. The line that passes through the two points $(2,-7)$ & $(-1,2)$

$m = \dfrac{2 - -7}{-1 - 2} = \dfrac{9}{-3}$

$m = -3$

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

or

$\boxed{y - 2 = -3(x+1)}$

or

$\boxed{y = -3x - 1}$

7. Write the equation of the line that is parallel to $y = -2x + 5$ and passes through the point $(-4,9)$.

Slope must be the same for lines to be parallel

$m = -2$ passes through $(-4,9)$

$\boxed{y - 9 = -2(x+4)}$

or

$\boxed{y = -2x + 1}$

1