Algebra 1
Practice problems
Quiz today 4.3-4.4

Ch. 4 MCT 4.1-4.4 Mon.
whiteboards

$$y = mx + B$$
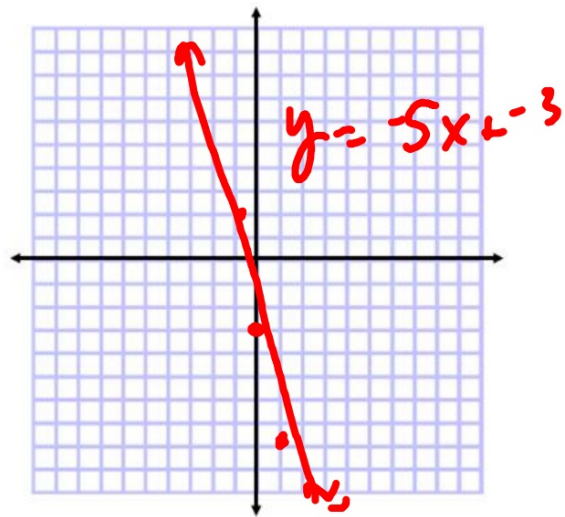
Example 1

Write an equation of a line in slope-intercept form with slope −.5 and *y*-intercept −3. Then graph the equation.

m

B

$$y = \frac{-5}{1}x + {}^-3$$

$$y = -5x \iota {}^-3$$

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

Example 2

Write an equation of the line that passes through (3, 2) with a slope of 5.

$$m$$

$$y - 2 = 5(x - 3)$$

$$2 = 5 \cdot 3 + B$$

$$2 = 15 + B$$

$$\underline{-15 \quad -15}$$

$$-13 = B$$

$$y = 5x + {}^-13$$

Write an equation of the line that passes through the given points.

23. $(2, -1), (5, 2)$ **24.** $(-4, 3), (1, 13)$

14. Write an equation in point-slope form for the line that passes through the point (8, 3), $m = -2$.

16. Write $y + 4 = -7(x - 3)$ in slope-intercept form.

23. $(0, -3)$; $y = -2x + 4$

perp

$m = \frac{1}{2}$

24. $(-4, -5); -4x + 5y = -6$ perpendicular

$+4x \qquad +4x$

$$\frac{5y}{8} = \frac{4}{5}x - \frac{6}{5}$$

$$y = \frac{4}{5}x - \frac{6}{5}$$

$$y = -\frac{5}{4}x - 10$$

$$-5 = -\frac{5}{4} \cdot -\frac{4}{1} + B$$

$$-5 = +5 + B$$

$$+ -5 \qquad + -5$$

$$-10 = B$$

Standard form:
- in order
- integers
- no GCF

$$5x + 2y = 3$$

$$y = 4x + 6$$
$$-4x \qquad -4x$$

$$4x - y = -6$$

$$\frac{-4x + y = 6}{-1 \quad \underline{y} \quad \frac{6}{-1}}$$

$$4. \quad y = \frac{-1}{4}x + 3$$

$$4y = -1x + 12$$
$$+x \qquad + x$$

$$x + 4y = 12$$

3. $y \overset{3.}{=} \frac{1}{3}x \overset{3.}{+} 2$

$3y = x + 6$
$-x \qquad -x$
_____

$\dfrac{-x}{-1} + \dfrac{3y}{-1} = \dfrac{6}{-1}$

$x - 3y = -6$