Algebra 1
Practice problems
Quiz today 4.3-4.4

Ch. 4 MCT 4.1-4.4 Tues.

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

$y = -5x - 3$

- Si $y = mx + B$
- ps $y - ? = m(x - ?)$
- St $Ax + By = C$

Example 2

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

x y

m

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

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

23. (2, −1), (5, 2)

24. (−4, 3), (1, 13)

$m = \frac{3}{3} = 1$

$y = 1x + B$

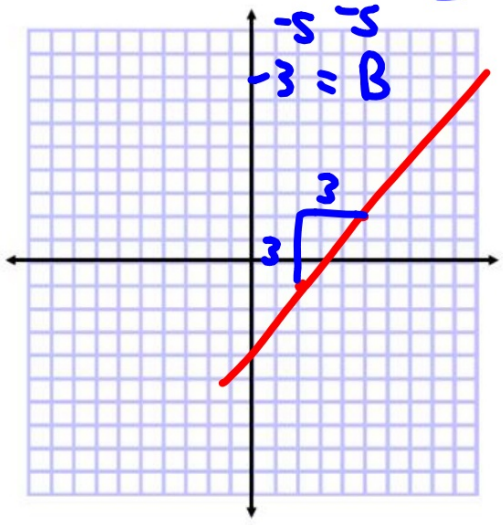
$2 = 1 \cdot 5 + B$

$2 - 5 + B$

$-5 \quad -5$

$-3 = B$

$y = x - 3$



14. Write an equation in point-slope form for the line that passes through the point (8, 3), $m = -2$. (Lesson 4-3)

$y - 3 = -2(x - 8)$

$y - 3 = -2x + 16$

$+3 \quad +3$

$y = -2x + 19$

$+2x \quad +2x$

$2x + y = 19$

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

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

$y = -2x + B$

$-3 = -2 \cdot 0 + B$

$-3 = 0 + B$

$y = -2x - 3$

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

x y

$+4x \quad +4y$

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

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

$m = -\frac{5}{4}$

$$y - -5 = -\frac{5}{4}(x - -4)$$

$$y + 5 = -\frac{5}{4}(x + 4)$$

Standard form:

- in order
- integers
- no GCF (also: A must be pos.)

3) $y = 2x + 6$ $(4, 2)$

For Mon:

MLP p. 246 odds