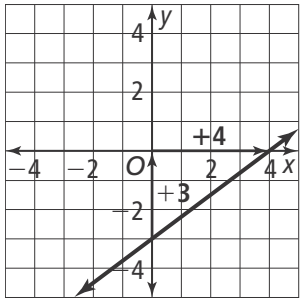
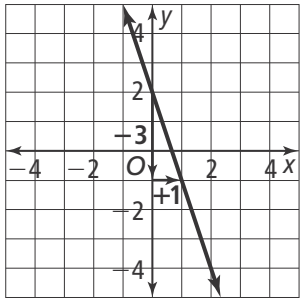
Name _____

2-1 Reteach to Build Understanding

Slope-Intercept Form

1. Draw lines from each statement to the graph it describes. Note the rise and run labeled on each graph.





The line has a slope of −3.

The *y*-intercept is 2.

The *y*-intercept is −3.

The line has a slope of $\frac{3}{4}$.

2. Marcus incorrectly identifies two of the key features of the graph $y = 3 - 4x$. Put an X next to any incorrect statements. Correct his errors.

a. The slope of the line is 3.

b. The line goes down from left to right.

c. The *y*-intercept is −4.

d. To graph the line, plot the *y*-intercept. Then plot another point 4 units down and one unit right.

3. What is an equation in slope-intercept form for the line that passes through the points (1, −3) and (3, 1)? Fill in the missing information.

First, use the two given points to find the slope.

$m = \frac{y_2 - y_1}{x_2 - x_1}$

$m = \frac{1 - (-3)}{3 - 1} = \frac{4}{2} =$ _____

Use the slope and one point to write an equation of the line in slope-intercept form.

$y = mx + b$	Slope-intercept form of a linear equation.
_____ = _____ + b	Substitute (1, −3) for (x_1, y_1) and 2 for m.
$b =$ _____	Solve for b.

An equation in slope-intercept form is _____.