NAME

Module 8 Writing Linear Equations of Two Variables

Lesson 3 Writing Equations of Lines, Given a Point and the Slope or Two Points

Set 1

1. Find the equation in slope-intercept form of the line that contains the point (9, 1) and has a slope of 5. $y = 5x - 44$

2. Find the equation in slope-intercept form of the line that contains the point (9, –6) and has a slope of $-\frac{4}{3}$. $y = -\frac{4}{3}x + 6$

3. Find the equation of the line that contains the point (4, –5) and has an undefined slope.

$x = 4$

4. Find the equation in slope-intercept form of the line that contains the point (0, 0) and is parallel to the graph of $y = x + 5$.

$y = x$

5. Find the equation in slope-intercept form of the line that contains the point (–8, 2) and is perpendicular to the graph of $y = -\frac{1}{2}x - 6$.

$y = 2x + 18$

Set 2

1. Find the equation in slope-intercept form of the line through the points (2, 5) and (6, 4).

$y = -\frac{1}{4}x + 5\frac{1}{2}$

2. Find the equation in slope-intercept form of the line through the points (–2, –1) and (0, 7).

$y = 4x + 7$

3. Find the equation in slope-intercept form of the line through the points (1, 1) and (–3, –7).

$y = 2x - 1$

4. Find the equation in slope-intercept form of the line that passes through the point (–1, 7) and is perpendicular to the line through the points (0, 0) and (5, –5). $y = x + 8$