Name Date

Unit 3 Test

Writing Linear Equations

State the form of each equation of a line: **standard**, **slope-intercept**, or **point-slope** form.

1. $3x - 5y = 10$
2. $y = -7x + 4$
3. $(y - 5) = 4(x - 6)$

4. What two things are needed to be able to write an equation in slope-intercept form?

5. What is needed to be able to find the slope of a line? Explain how to find the slope of a line once you have what you need.

Name the slope and *y*-intercept in each equation of a line.

6. $2x - y = 5$
7. $y = -3x - 2$
8. $5x + y - 12 = 0$

Write an equation of a line in slope-intercept form that passes through the given point and has the given slope. State each *y*-intercept.

9. (7, -9), $m = -4$
10. (5, -6), $m = 4$
11. (2, -1), $m = -2$
12. (-3, -2), $m = -2$
13. (-1, 8), $m = -3$
14. (-6, -2), $m = 5$

Write an equation of a line in point-slope form given two points on the line. State the slope and *y*-intercept of each line.

15. (12, -10), (8, -2)
16. (5, -7), (-6, 4)
17. (-3, -2), (-1, 2)