4-3 Writing Equations in Point-Slope Form

Write an equation in point-slope form, slope-intercept form, and standard form for each line.

20. $m = -3$, $(-2, 6)$

24. $m = -\frac{3}{2}$, $(-1, -7)$

Write an equation in point-slope form, slope-intercept form, and standard form for each line.

28. $(-4, 11)$, $(-8, -1)$

32. $(-8, -6)$, $(4, -15)$

35. **MOVIE RENTALS** The number of copies of a movie rented at a movie kiosk decreased at a constant rate as shown in the table. How many copies were rented during the second week?

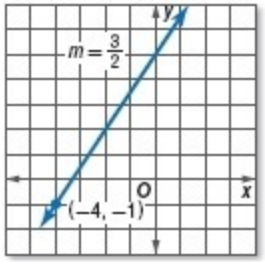
Weeks After Release	4	6
Number of Movies Rented	14	4

Write an equation for the line described in standard form.

37. through $(-1, 7)$ and $(8, -2)$

39. with x-intercept 4 and y-intercept 5

Write an equation in point-slope form for each line.

41. 

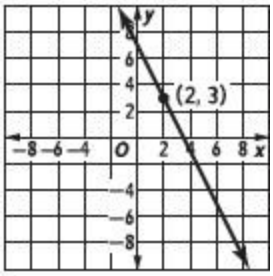
Write each equation in slope-intercept form.

43. $y + \frac{3}{5} = x - \frac{2}{5}$

45. $y + \frac{1}{3} = \frac{5}{6}\left(x + \frac{2}{5}\right)$

53. **PROBLEM SOLVING** Write an equation in point-slope form for the line that passes through the points (f, g) and (h, j).

55. Which equation is represented by the graph?



A $y = -2x - 7$
B $y - 3 = -2(x - 2)$
C $x - 2 = y - 3$
D $y - 2 = -2(x - 3)$

56. Kellie earns $12.00 per hour working at the coffee shop. Using the table below, write an equation that models Kellie's wages y for the number of hours worked x in point-slope form.

Hours (x)	Wages (y)
1	$12.00
3	$36.00
5	$60.00
8	$96.00

F $y = 12x + 24$
G $y - 12 = 12(x - 1)$
H $y + 12 = 12(x + 1)$
J $y - 1 = 12(x - 12)$