

# Practice 5-4

## Point-Slope Form and Writing Linear Equations

Write an equation in point-slope form for the line through the given points or through the given point with the given slope.

1.	$(5,7), (6, 8)$	2.	$(-2,3); m = -1$	3.	$(1,2), (3,8)$	4.	$(-2,3); m = 4$
5.	$(4,7); m = \frac{3}{2}$	6.	$(6, -2); m = -\frac{4}{3}$	7.	$(0,5), (-3,2)$	8.	$(8,11), (6,16)$
9.	$(4,2), (-4, -2)$	10.	$(15,16), (13,10)$	11.	$(0, -7); m = -4$	12.	$(-3,4), (1,6)$
13.	$(1,2); m$ undefined	14.	$(-6,7); m = -\frac{1}{2}$	15.	$(21, -2), (27,2)$	16.	$(7,5); m = 0$

Write the equation of the line through the given points in slope-intercept form. Then rewrite the equation in standard form using integers.

17.	$(8, -2), (14,1)$	18.	$(4, 8), (2,12)$	19.	$(-5,13), (-10,9)$	20.	$(6,2), (-1,7)$
21.	$(5, -\left(\frac{5}{3}, \frac{3}{2}\right) - 2, 0)$	22.	$(0,7), (-5,12)$	23.	$(-6,2),$	24.	$(100,90), (80,120)$
25.	$(-3,6), (3, -6)$	26.	$(11,7), (9,3)$	27.	$(2,7), \left(\frac{5}{2}, 3\right)$	28.	$(-9, 8), \left(-\frac{5}{3}, 2\right)$

29.

x	y
2	3
3	7
4	11
5	15

30.

x	y
-3	4
-1	6
1	7
3	10

32.

x	y
-2	5
3	-5
7	-13
11	-21

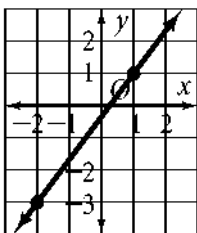
31.

x	y
-4	12
-1	8
5	-4
10	-8

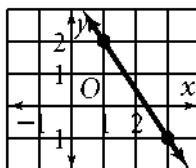
Is the relationship shown by the data linear? If so, model the data with an equation.		
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Write an equation for each line in point-slope form.

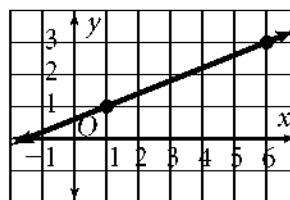
33.



34.



35.



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Practice

Algebra 1 Lesson 5-4

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