

Name _____ Class _____ Date _____

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.

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|-----------------------------|--------------------------------|-----------------------|--------------------|
| 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.

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| 17. (8, -2), (14,1) | 18. (4, 8), (2,12) | 19. (-5,13), (-10,9) | 20. (6,2), (-1,7) |
| 21. (5, -3), (-2,0) | 22. (0,7), (-5,12) | 23. (-6,2), (0,5) | 24. (100,90), (80,120) |

Write an equation for each line in point-slope form. Then rewrite the equation in slope-intercept form.

