

NAME _____

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Module 8 Writing Linear Equations of Two Variables
Lesson 3 Writing Equations of Lines, Given a Point and the Slope or Two Points



**additional
practice**

Write the equation in slope-intercept form of the line that passes through the given point with the given slope.

1. Passes through: (1, 4) Slope: $\frac{4}{3}$

2. Passes through: (-2, 4) Slope: $-\frac{1}{4}$

3. Passes through: (5, -1) Slope: -2

4. Passes through: (2, 1) Slope: $\frac{2}{5}$

5. Passes through: (4, 4) Slope: $\frac{2}{3}$

6. Passes through: (0, -3) Slope: undefined

7. Passes through: (-4, -5) Slope: $-\frac{3}{8}$

8. Passes through: (6, 1) Slope: 0

Write the equation in slope-intercept form of the line that passes through the given points.

9. (5, 3) and (3, -4)

10. (10, 1) and (-2, -2)

11. (7, -2) and (1, 6)

12. (-4, -1) and (2, 0)

13. (-4, 2) and (0, -2)

14. (1, 9) and (-3, 4)

Write the slope-intercept form of the equation of the line described.

15. Parallel to the line $y = -\frac{1}{2}x + 4$ and passes through the point (4, 5).

16. Perpendicular to the line $y = -3x - 2$ and passes through the point (-1, -3).

17. Perpendicular to line containing the points (6, 2) and (-5, 1) and passes through the point (-1, 6).

18. Parallel to line containing the points (-4, 6) and (3, -7) and passes through the origin.

