

Name:

Date:

Topic:

Class:

| Main Ideas/Questions | Notes/Examples | |
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| WRITING LINEAR EQUATIONS (Given a Point and Slope) | To write the equation of the line passing through point (x_1, y_1) with slope (m) , you can use the point-slope formula: Point-Slope Formula: <div style="border: 1px solid black; width: 350px; height: 50px; margin: 10px auto;"></div> *Be sure to distribute and solve for $y!$ * | |
| EXAMPLES | Directions: Write the equation of the line that passes through the given point and has the given slope. Write all final answers in slope-intercept form. | |
| | 1. $(4, 1)$; slope = 2 | 2. $(2, 4)$; slope = $\frac{1}{2}$ |
| | 3. $(-6, 0)$; slope = $\frac{2}{3}$ | 4. $(-8, -1)$; slope = $-\frac{3}{4}$ |
| | 5. $(4, -3)$; slope = -1 | 6. $(0, -9)$; slope = 4 |

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