

Writing Equations and Point-Slope Form

Period _____ Group _____

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Write the standard form of the equation of each line given the slope and y-intercept.

1) Slope = $-\frac{1}{5}$, y-intercept = -3

2) Slope = $\frac{1}{2}$, y-intercept = -4

3) Slope = $\frac{4}{3}$, y-intercept = 1

4) Slope = -1 , y-intercept = -1

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

5) through: $(-1, 3)$, slope = -3

6) through: $(2, -5)$, slope = -2

7) through: $(1, -5)$, slope = -4

8) through: $(-3, 4)$, slope = $-\frac{7}{3}$

Write the standard form of the equation of the line through the given point with the given slope.

9) through: $(-5, -1)$, slope = $\frac{1}{5}$

10) through: $(3, 5)$, slope = $\frac{4}{3}$

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

11) through: $(2, 1)$ and $(-5, 0)$

12) through: $(1, 4)$ and $(5, 2)$

13) through: $(-2, 3)$ and $(5, -3)$

14) through: $(5, 5)$ and $(5, 4)$

Write the standard form of the equation of the line through the given points.

15) through: $(4, 5)$ and $(5, -5)$

16) through: $(-3, 5)$ and $(5, -1)$

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

17) through: $(5, 3)$, parallel to $y = \frac{7}{4}x - 3$

18) through: $(5, 0)$, parallel to $y = \frac{4}{9}x - 4$

19) through: $(5, -4)$, perp. to $y = 2x + 2$

20) through: $(0, 4)$, perp. to $y = -5$

Answers to Writing Equations and Point-Slope Form (ID: 1)

1) $x + 5y = -15$

2) $x - 2y = 8$

3) $4x - 3y = -3$

4) $x + y = -1$

5) $y = -3x$

6) $y = -2x - 1$

7) $y = -4x - 1$

8) $y = -\frac{7}{3}x - 3$

9) $x - 5y = 0$

10) $4x - 3y = -3$

11) $y = \frac{1}{7}x + \frac{5}{7}$

12) $y = -\frac{1}{2}x + \frac{9}{2}$

13) $y = -\frac{6}{7}x + \frac{9}{7}$

14) $x = 5$

15) $10x + y = 45$

16) $3x + 4y = 11$

17) $y = \frac{7}{4}x - \frac{23}{4}$

18) $y = \frac{4}{9}x - \frac{20}{9}$

19) $y = -\frac{1}{2}x - \frac{3}{2}$

20) $x = 0$