AC Algebra 1/Geo A Name_____ ID: 1

Writing Equations of Linear Functions

Date_____ Period____

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

1) through: $(-3, 3)$, slope $= -\frac{5}{3}$

2) through: $(1, 4)$, slope $= \frac{2}{5}$

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

3) through: $(0, -4)$ and $(-4, 3)$

4) through: $(1, 3)$ and $(0, 2)$

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

5) through: $(5, -3)$, parallel to $y = 5$

6) through: $(2, -5)$, parallel to $y = -\frac{9}{4}x - 4$

7) through: $(3, -3)$, perp. to $y = -3x - 1$

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

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

9) Slope $= \frac{1}{2}$, y-intercept = 0

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

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

11) through: $(2, 5)$, slope = -10

12) through: $(-3, -4)$, slope = 0

Write the slope intercpet AND standard form of the equation of the line described.

13) through: $(-3, -1)$, perp. to $y = -\frac{3}{4}x - 3$

14) through: $(-1, 2)$, perp. to $y = x + 1$

15) through: $(-2, 1)$, parallel to $y = -\frac{1}{2}x - 5$

16) through: $(-1, -4)$, parallel to $y = 7x - 4$

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

17) through: $(0, 4)$ and $(-3, 2)$

18) through: $(0, 0)$ and $(5, 2)$

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

19) through: $(2, 2)$ and $(0, -1)$

20) through: $(5, -1)$ and $(4, 1)$

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Date_____ Period____

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

1) through: $(-3, 3)$, slope $= -\frac{5}{3}$ $y = -\frac{5}{3}x - 2$

2) through: $(1, 4)$, slope $= \frac{2}{5}$ $y = \frac{2}{5}x + \frac{18}{5}$

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

3) through: $(0, -4)$ and $(-4, 3)$ $y = -\frac{7}{4}x - 4$

4) through: $(1, 3)$ and $(0, 2)$ $y = x + 2$

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

5) through: $(5, -3)$, parallel to $y = 5$ $y = -3$

6) through: $(2, -5)$, parallel to $y = -\frac{9}{4}x - 4$ $y = -\frac{9}{4}x - \frac{1}{2}$

7) through: $(3, -3)$, perp. to $y = -3x - 1$ $y = \frac{1}{3}x - 4$

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

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

9) Slope $= \frac{1}{2}$, y-intercept $= 0$ $y = \frac{1}{2}x$

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

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

11) through: $(2, 5)$, slope = -10

$y = -10x + 25$

12) through: $(-3, -4)$, slope = 0

$y = -4$

Write the slope intercpet AND standard form of the equation of the line described.

13) through: $(-3, -1)$, perp. to $y = -\frac{3}{4}x - 3$

$4x - 3y = -9$

14) through: $(-1, 2)$, perp. to $y = x + 1$

$x + y = 1$

15) through: $(-2, 1)$, parallel to $y = -\frac{1}{2}x - 5$

$x + 2y = 0$

16) through: $(-1, -4)$, parallel to $y = 7x - 4$

$7x - y = -3$

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

17) through: $(0, 4)$ and $(-3, 2)$

$2x - 3y = -12$

18) through: $(0, 0)$ and $(5, 2)$

$2x - 5y = 0$

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

19) through: $(2, 2)$ and $(0, -1)$ $y = \frac{3}{2}x - 1$

20) through: $(5, -1)$ and $(4, 1)$

$y = -2x + 9$