Creating Linear Equations Name_____

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

1) Slope = $-\frac{1}{5}$, y-intercept = -2

2) Slope = $\frac{8}{5}$, y-intercept = 4

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

4) Slope = $\frac{1}{3}$, y-intercept = 0

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

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

6) through: $(3, 3)$, slope = 3

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

8) through: $(-4, 1)$, slope = $\frac{3}{4}$

9) through: $(-3, 2)$, slope = -1

10) through: $(-4, 0)$, slope = 0

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

11) through: $(5, -2)$, parallel to $y = -\frac{6}{7}x + 1$

12) through: $(1, 2)$, parallel to $y = -3x - 1$

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

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

15) through: $(-1, -5)$, parallel to $x = 0$

16) through: $(-1, 3)$, parallel to $y = 7x - 1$

17) through: $(-4, -4)$, parallel to $y = 3$

18) through: $(2, 5)$, parallel to $y = -1$

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

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

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

22) through: $(-5, 2)$, perp. to $y = \frac{5}{6}x$

23) through: $(2, 0)$, perp. to $y = -x - 1$

24) through: $(-5, -3)$, perp. to $y = -\frac{5}{8}x$

25) through: $(-1, -3)$, perp. to $y = -\frac{3}{8}x + 1$

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

27) through: $(-3, -3)$, perp. to $y = -\frac{3}{8}x + 2$

28) through: $(2, -2)$, perp. to $y = 2$

29) through: $(-2, 3)$, perp. to $y = \frac{7}{5}x - 2$

30) through: $(-2, -2)$, perp. to $y = -\frac{5}{4}x$

Creating Linear Equations Name_____

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

1) Slope $= -\frac{1}{5}$, y-intercept $= -2$

$y = -\frac{1}{5}x - 2$

2) Slope $= \frac{8}{5}$, y-intercept $= 4$

$y = \frac{8}{5}x + 4$

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

$y = -\frac{3}{4}x + 4$

4) Slope $= \frac{1}{3}$, y-intercept $= 0$

$y = \frac{1}{3}x$

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

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

$y = -\frac{3}{5}x + 4$

6) through: $(3, 3)$, slope $= 3$

$y = 3x - 6$

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

$y = -x$

8) through: $(-4, 1)$, slope $= \frac{3}{4}$

$y = \frac{3}{4}x + 4$

9) through: $(-3, 2)$, slope $= -1$

$y = -x - 1$

10) through: $(-4, 0)$, slope $= 0$

$y = 0$

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

11) through: $(5, -2)$, parallel to $y = -\frac{6}{7}x + 1$

$y = -\frac{6}{7}x + \frac{16}{7}$

12) through: $(1, 2)$, parallel to $y = -3x - 1$

$y = -3x + 5$

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

$y = -\frac{2}{5}x - 1$

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

$y = -x + 1$

15) through: $(-1, -5)$, parallel to $x = 0$

$x = -1$

16) through: $(-1, 3)$, parallel to $y = 7x - 1$

$y = 7x + 10$

17) through: $(-4, -4)$, parallel to $y = 3$

$y = -4$

18) through: $(2, 5)$, parallel to $y = -1$

$y = 5$

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

$y = \frac{9}{2}x - \frac{35}{2}$

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

$y = -x$

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

$y = \frac{1}{2}x - 4$

22) through: $(-5, 2)$, perp. to $y = \frac{5}{6}x$

$y = -\frac{6}{5}x - 4$

23) through: $(2, 0)$, perp. to $y = -x - 1$

$y = x - 2$

24) through: $(-5, -3)$, perp. to $y = -\frac{5}{8}x$

$y = \frac{8}{5}x + 5$

25) through: $(-1, -3)$, perp. to $y = -\frac{3}{8}x + 1$

$y = \frac{8}{3}x - \frac{1}{3}$

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

$y = -3x + 2$

27) through: $(-3, -3)$, perp. to $y = -\frac{3}{8}x + 2$

$y = \frac{8}{3}x + 5$

28) through: $(2, -2)$, perp. to $y = 2$

$x = 2$

29) through: $(-2, 3)$, perp. to $y = \frac{7}{5}x - 2$

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

30) through: $(-2, -2)$, perp. to $y = -\frac{5}{4}x$

$y = \frac{4}{5}x - \frac{2}{5}$