

Writing Equations of Lines

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

1) through: $(-1, 4)$, slope = -2

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

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

4) through: $(4, -4)$, slope = -2

5) through: $(3, -4)$, slope = -3

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

7) through: $(2, 2)$, slope = 3

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

9) through: $(-3, 0)$, slope = $-\frac{5}{3}$

10) through: $(-4, -4)$, slope = -2

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

11) through: $(-4, 4)$ and $(2, -2)$

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

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

14) through: $(-5, 2)$ and $(-2, 0)$

15) through: $(-5, -5)$ and $(1, 0)$

16) through: $(4, 5)$ and $(4, 2)$

17) through: $(-3, 3)$ and $(-5, 4)$

18) through: $(0, 3)$ and $(-5, -4)$

19) through: $(0, 4)$ and $(-3, -5)$

20) through: $(0, 4)$ and $(-2, -1)$

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

21) through: $(2, 3)$, parallel to $y = 4x + 5$

22) through: $(4, -5)$, parallel to $x = 0$

23) through: $(-5, -5)$, parallel to $y = 2x + 5$

24) through: $(4, 2)$, parallel to $y = \frac{5}{4}x + 4$

25) through: $(1, -2)$, parallel to $y = x + 5$

26) through: $(-2, 4)$, parallel to $y = -3x + 4$

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

28) through: $(3, -3)$, parallel to $y = -x + 4$

29) through: $(-5, 1)$, parallel to $y = -\frac{1}{5}x + 4$

30) through: $(3, 4)$, parallel to $y = x - 1$

31) through: $(4, -4)$, perp. to $y = \frac{2}{3}x + 3$

32) through: $(1, 2)$, perp. to $y = x + 5$

33) through: $(-4, 0)$, perp. to $y = -4x + 3$

34) through: $(-2, -1)$, perp. to $y = -\frac{2}{5}x + 3$

35) through: $(3, 2)$, perp. to $y = x + 3$

36) through: $(-5, -5)$, perp. to $y = -\frac{5}{9}x + 3$

37) through: $(4, 0)$, perp. to $y = \frac{4}{5}x + 5$

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

39) through: $(5, 1)$, perp. to $y = -\frac{5}{4}x + 2$

40) through: $(2, 1)$, perp. to $y = -\frac{5}{4}x - 2$