

$$y - y_1 = m(x - x_1)$$

3-8 Finding Equation Of A Line (ver4)_hw

Use POINT-SLOPE formula to write the equation of a line ($y=mx+b$) through the given points.

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|---------------------------------------|--------------------------------------|
| 1) through: $(-1, -5)$ and $(0, 0)$ | 2) through: $(0, -3)$ and $(1, 0)$ |
| 3) through: $(0, 1)$ and $(-2, 5)$ | 4) through: $(0, -1)$ and $(5, 4)$ |
| 5) through: $(0, -5)$ and $(2, 5)$ | 6) through: $(2, -4)$ and $(0, 3)$ |
| 7) through: $(0, -4)$ and $(-1, 1)$ | 8) through: $(-2, -4)$ and $(0, -1)$ |
| 9) through: $(0, -3)$ and $(3, 5)$ | 10) through: $(0, 0)$ and $(2, 5)$ |
| 11) through: $(0, 2)$ and $(2, 2)$ | 12) through: $(0, 4)$ and $(-4, 0)$ |
| 13) through: $(5, 5)$ and $(4, 3)$ | 14) through: $(-4, 0)$ and $(-5, 3)$ |
| 15) through: $(1, 5)$ and $(0, 3)$ | 16) through: $(-2, 4)$ and $(4, -5)$ |
| 17) through: $(-4, 3)$ and $(0, 1)$ | 18) through: $(2, 4)$ and $(5, -2)$ |
| 19) through: $(-4, -3)$ and $(0, -4)$ | 20) through: $(3, -4)$ and $(2, 4)$ |

Answers to 3-8 Finding Equation Of A Line (ver4)_hw

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|-----------------------------|----------------------------|-----------------------------|-----------------------------|
| 1) $y = 5x$ | 2) $y = 3x - 3$ | 3) $y = -2x + 1$ | 4) $y = x - 1$ |
| 5) $y = 5x - 5$ | 6) $y = -\frac{7}{2}x + 3$ | 7) $y = -5x - 4$ | 8) $y = \frac{3}{2}x - 1$ |
| 9) $y = \frac{8}{3}x - 3$ | 10) $y = \frac{5}{2}x$ | 11) $y = 2$ | 12) $y = x + 4$ |
| 13) $y = 2x - 5$ | 14) $y = -3x - 12$ | 15) $y = 2x + 3$ | 16) $y = -\frac{3}{2}x + 1$ |
| 17) $y = -\frac{1}{2}x + 1$ | 18) $y = -2x + 8$ | 19) $y = -\frac{1}{4}x - 4$ | 20) $y = -8x + 20$ |

21) through: $(-4, -3)$ and $(-5, 1)$

22) through: $(2, 0)$ and $(0, 2)$

23) through: $(5, 0)$ and $(3, 0)$

24) through: $(-1, 2)$ and $(0, 3)$

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

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

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

28) through: $(0, 2)$ and $(-5, -4)$

29) through: $(2, 5)$ and $(4, -3)$

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

31) through: $(-1, 4)$ and $(-2, 3)$

32) through: $(2, 2)$ and $(3, 1)$

33) through: $(0, 3)$ and $(1, 1)$

34) through: $(-2, -3)$ and $(-3, -4)$

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

36) through: $(0, 2)$ and $(-2, -3)$

37) through: $(4, 4)$ and $(0, 1)$

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

39) through: $(5, -5)$ and $(-2, 2)$

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

Answers to 3-8 Finding Equation Of A Line (ver4)_hw

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|----------------------------|---------------------|-------------------|----------------------------|
| 21) $y = -4x - 19$ | 22) $y = -x + 2$ | 23) $y = 0$ | 24) $y = x + 3$ |
| 25) $y = \frac{3}{4}x - 3$ | 26) $y = -10x + 45$ | 27) $y = 2x + 1$ | 28) $y = \frac{6}{5}x + 2$ |
| 29) $y = -4x + 13$ | 30) $y = -8x + 37$ | 31) $y = x + 5$ | 32) $y = -x + 4$ |
| 33) $y = -2x + 3$ | 34) $y = x - 1$ | 35) $y = -4x + 1$ | 36) $y = \frac{5}{2}x + 2$ |
| 37) $y = \frac{3}{4}x + 1$ | 38) $y = -10x - 25$ | 39) $y = -x$ | 40) $y = -\frac{2}{5}x$ |