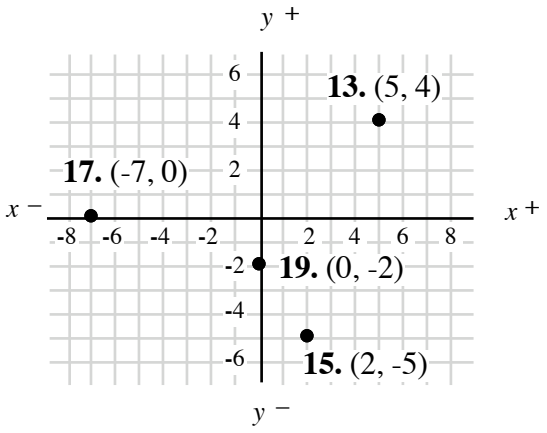
Chapter 4 **Elementary Algebra, Norco Edition**
Answers to Odd Exercises

Section 4.1

5. 10 = 10; Yes **7.** -10 ≠ 10; No **9.** 0 ≠ 5; No **11.** -1 = -1; Yes



21. (3, 3) **23.** (-6, 5)
25. (-7, -3) **27.** (4, -4)
29. Quadrant IV **31.** Quadrant II
33. Quadrant III **35.** Quadrant IV
37. Quadrant IV **39.** Quadrant I
41. (0, 6) is on the positive *y*-axis
43. (3, 0) is on the positive *x*-axis
45. (0, -7) is on the negative *y*-axis

47. (0, 0) is the origin; it is on both the *x*-axis and the *y*-axis.

49. (-3, 0) **51.** (2, 0) **53.** (0, -5) **55.** (0, -2)

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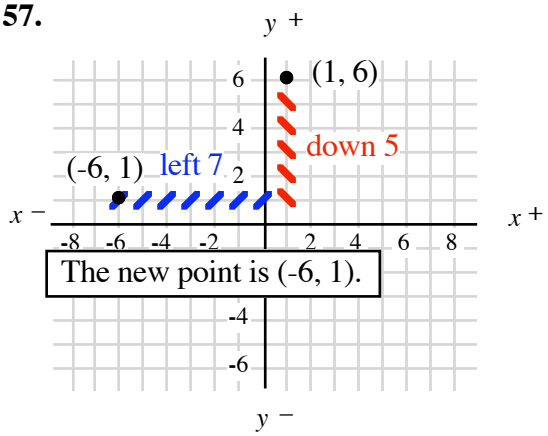

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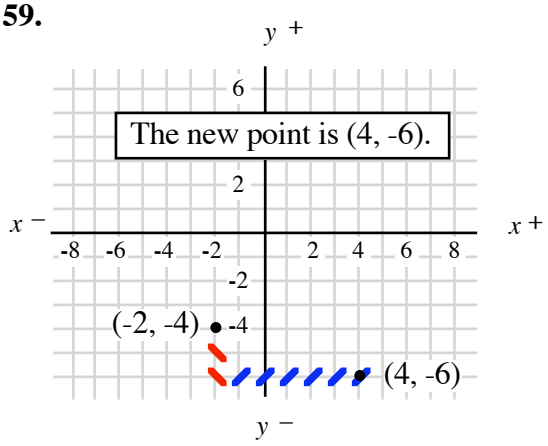

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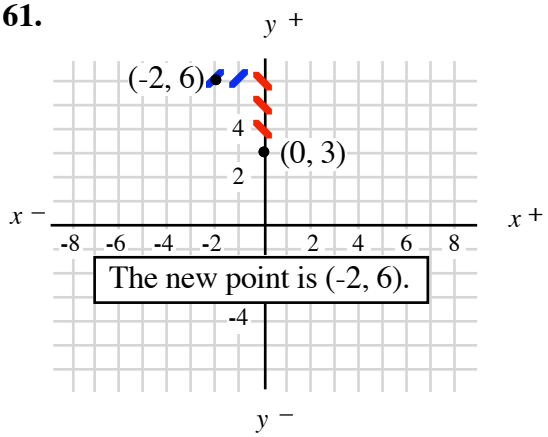

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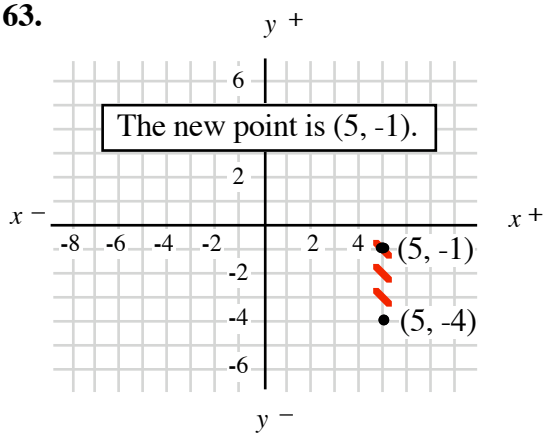

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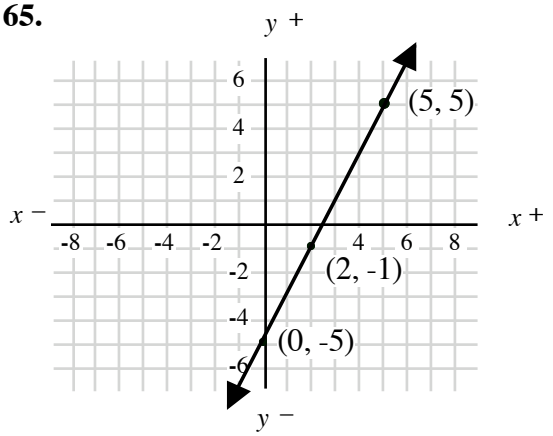

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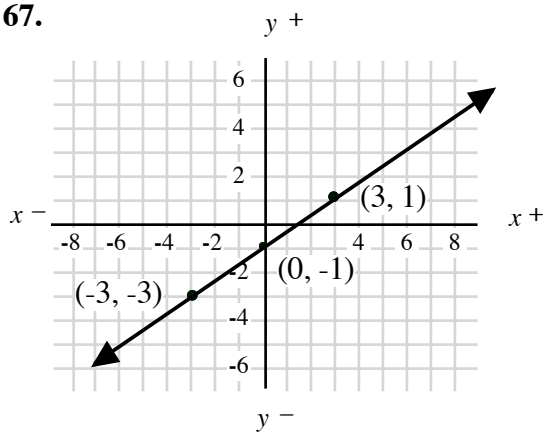

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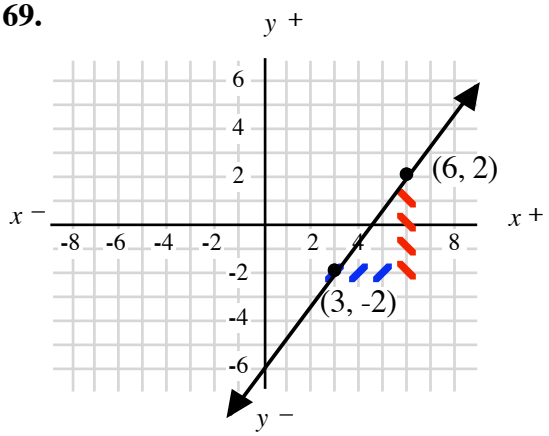

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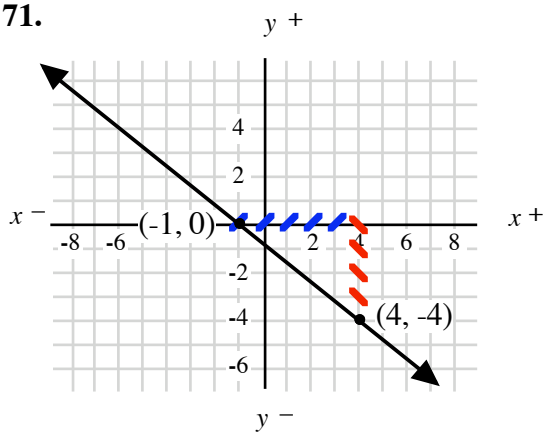

73. (1, 3), (0, 1), and (-2, -3)

75. (0, 4), (3, 3), and (-6, 6)

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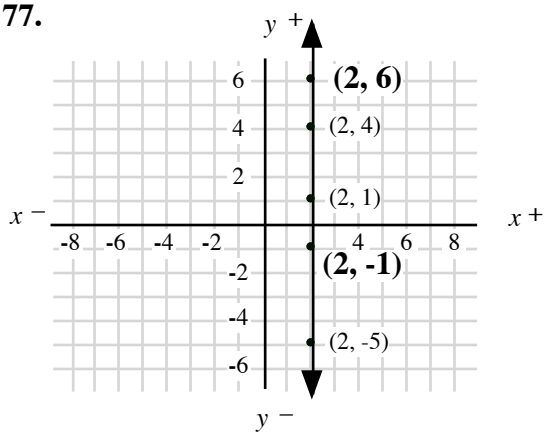

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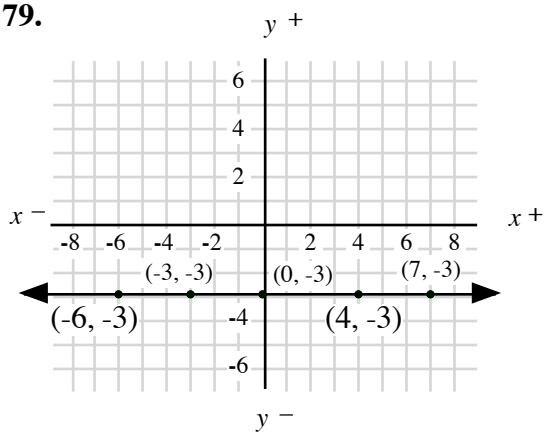
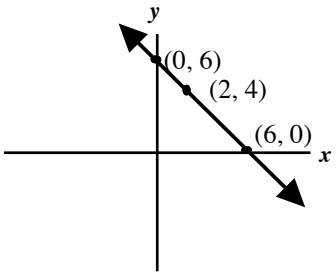


81. $4 \neq -4$; No

83. $6 = 6$; Yes

Section 4.2

5.



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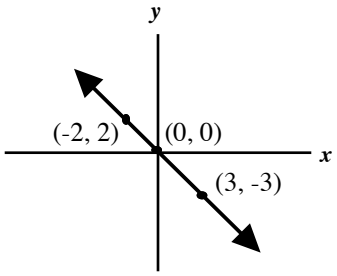

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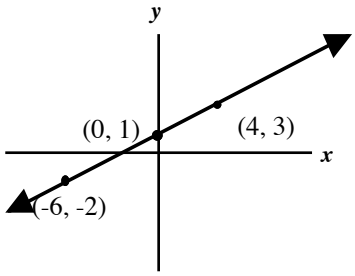

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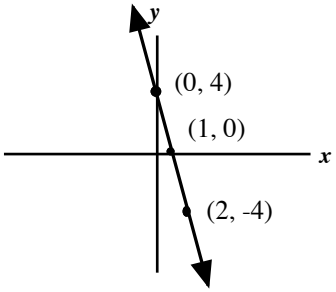

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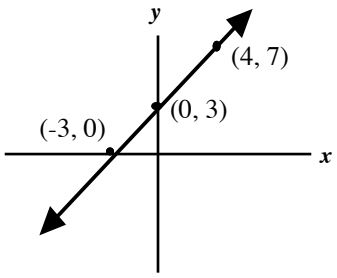

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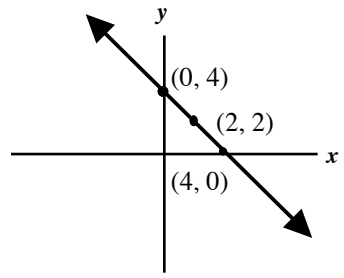

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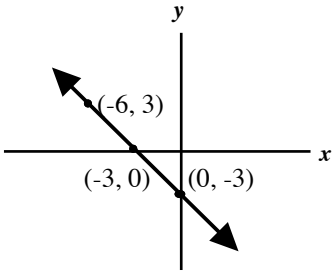

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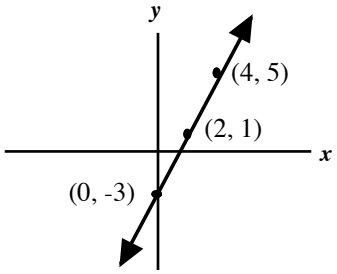

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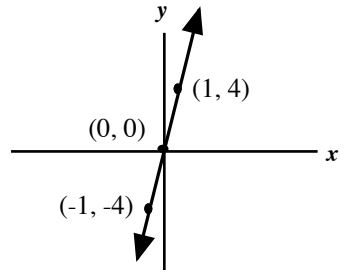

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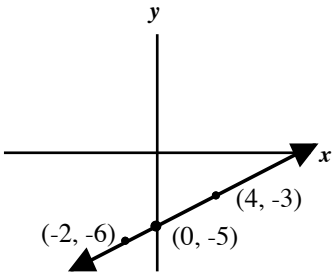

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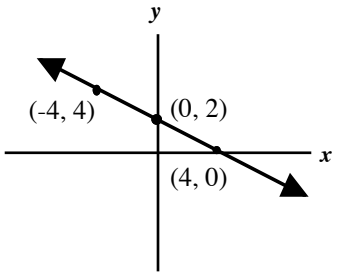

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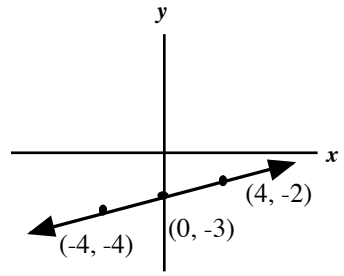

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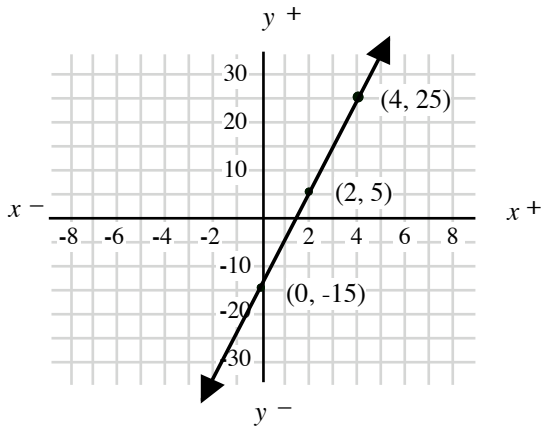

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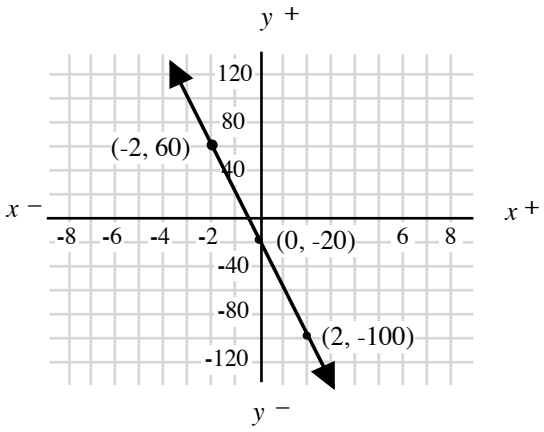
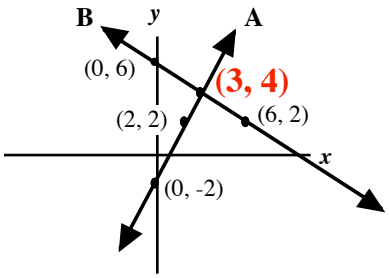


33. The lines cross at (3, 4):



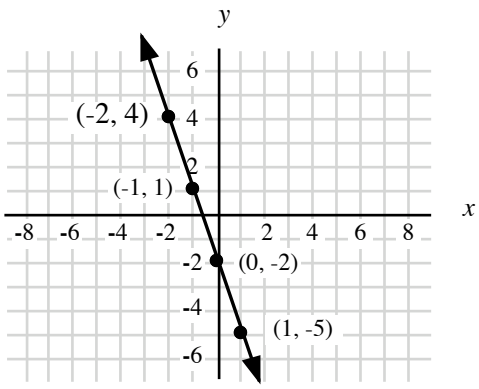
Section 4.3

5. The slope ratio of the ramp is $\frac{2}{21}$.

7. The slope ratio of the mountain is $\frac{9}{4}$.

Please note: Some points shown may be different from yours.

9.



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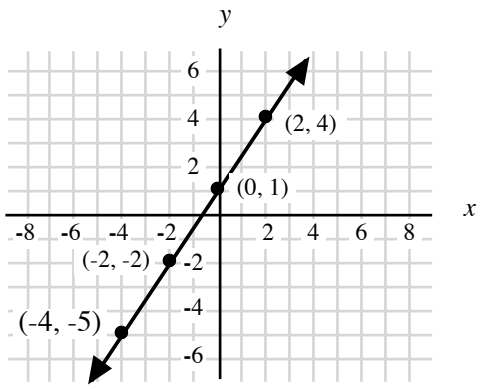

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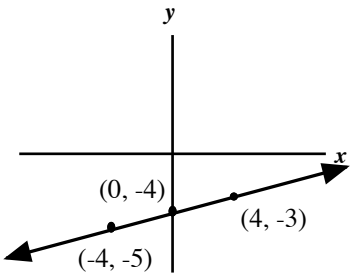

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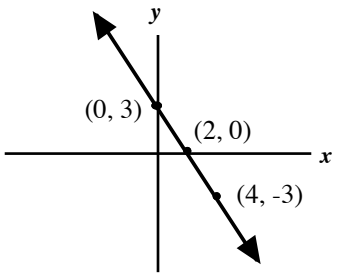

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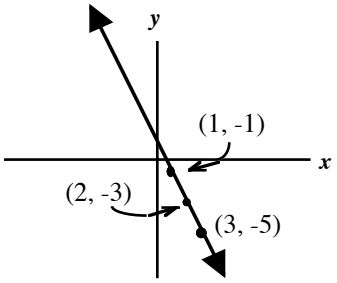

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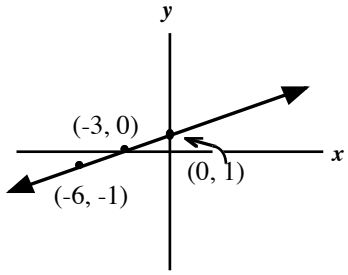

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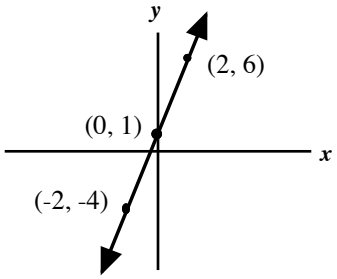

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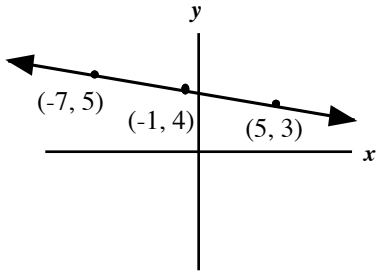

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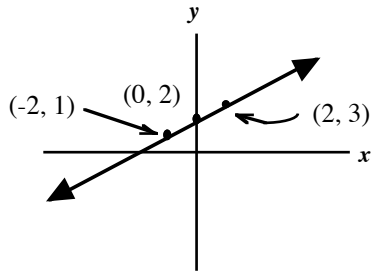

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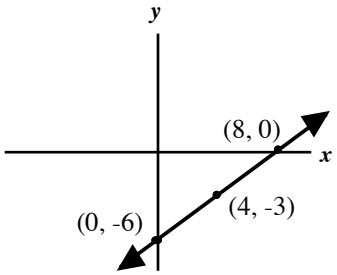

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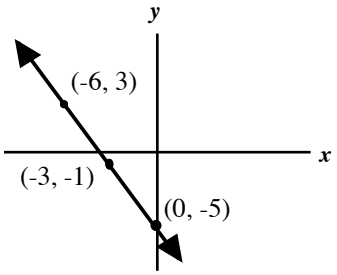

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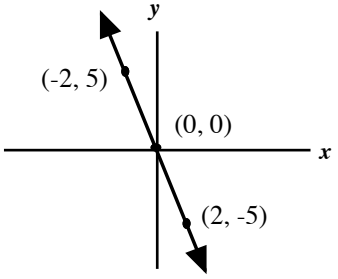

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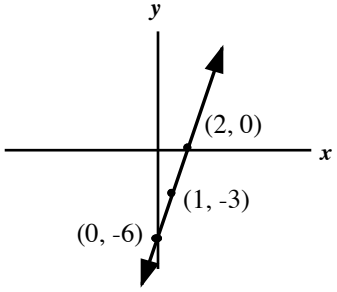

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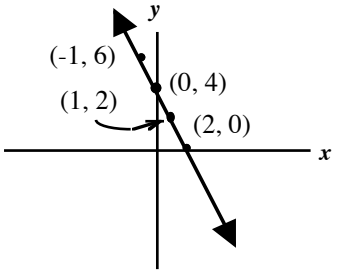

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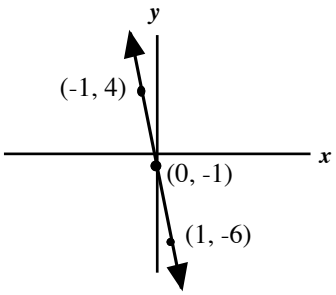

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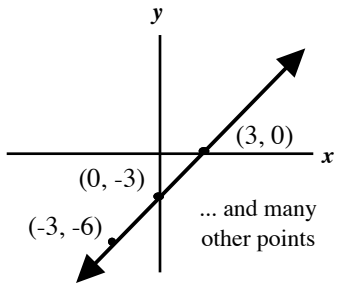


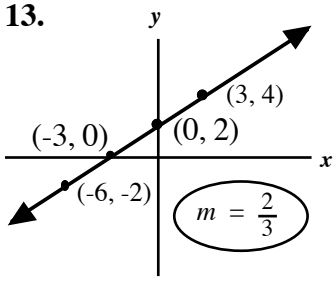
41. The equation of the line is $y = -\frac{1}{3}x + 4$

43. The equation of the line is $y = 2x + 3$

Section 4.4

5. $m = \frac{3}{4}$ **7.** $m = \frac{5}{2}$ **9.** $m = -\frac{3}{5}$ **11.** $m = -\frac{1}{5}$

13.



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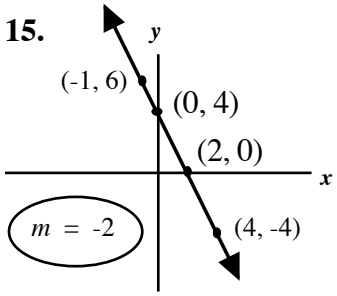

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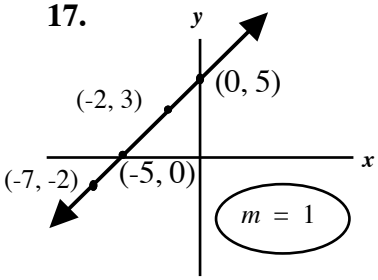

19. $y = \frac{5}{3}x + 1$ **21.** $y = \frac{2}{7}x + 4$ **23.** $y = -\frac{3}{2}x - 2$

25. $y = -\frac{3}{4}x - 5$ **27.** $m = 1$ **29.** $m = 1$

31. $m = -2$ **33.** $m = -\frac{3}{2}$ **35.** $m = 2$

37. $m = \frac{1}{4}$ **39.** $m = \frac{1}{4}$ **41.** $m = 0$

43. $y = 3x + 7$ **45.** $y = -\frac{1}{2}x + 11$ **47.** $y = -2x - 8$

49. $y = -\frac{5}{3}x$ **51.** $y = -\frac{2}{5}x + 10$ **53.** $y = -\frac{3}{4}x - 15$

55. $y = -\frac{1}{3}x + 3$ **57.** $y = 2x$

Section 4.5

5. $y = 2x + 5$ **7.** $y = x - 7$ **9.** $y = \frac{1}{2}x - 5$

11. $y = -x + 3$ **13.** $y = -3x + 5$ **15.** $y = -x - 5$

17. $y = \frac{8}{3}x + 1$ **19.** $y = \frac{9}{4}x + \frac{1}{2}$ **21.** $y = -2x - 3$

23. $y = -\frac{4}{3}x - 5$ **25.** $y = -\frac{3}{5}x + 4$ **27.** $y = 3x - 2$

29. $y = -2x + 25$ **31.** $y = -\frac{7}{4}x - \frac{1}{4}$ **33.** $y = 2$

35. $y = 0$

Section 4.6

3. $2x + 3y = 15$ **5.** $2x + y = 1$ **7.** $5x + 3y = -3$

9. $x - y = 0$ **11.** $3x + 8y = 0$ **13.** $8x - 6y = -1$

15. $y = -4x + 2$; (0, 2) and $m = -4$ **17.** $y = 2x + 5$; (0, 5) and $m = 2$

19. $y = \frac{2}{5}x - 3$; (0, -3) and $m = \frac{2}{5}$ **21.** x-int: (2, 0); y-int: (0, 8)

23. x-int: (-10, 0); y-int: (0, -6) **25.** x-int: (3, 0); y-int: (0, 10)

27. x-int: (-8, 0); y-int: (0, 5)

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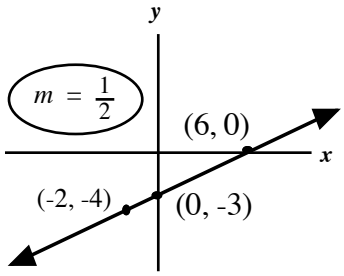

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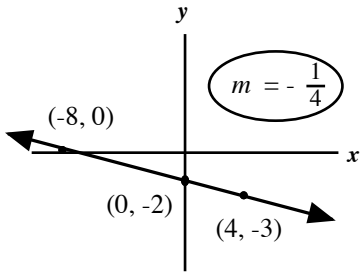

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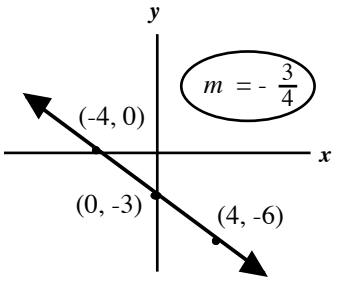

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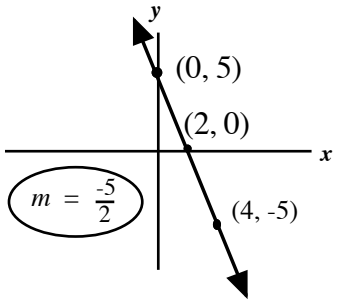

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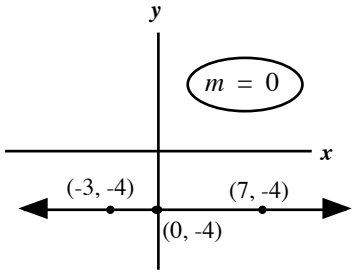

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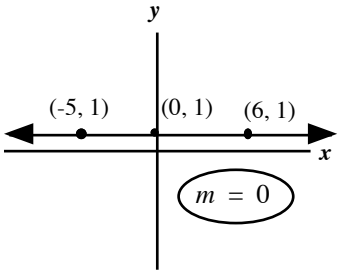

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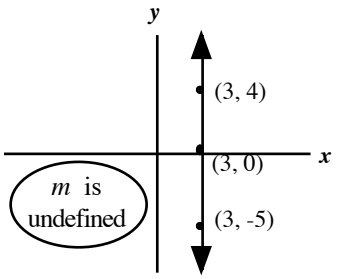
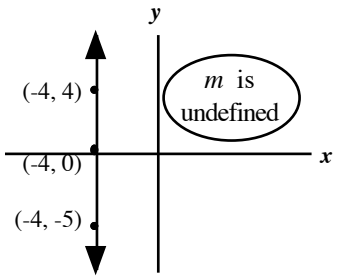


43.



45. $x = 6$

47. $y = -3$

49. $y = \frac{-A}{B}x + \frac{C}{B}$; $m = \frac{-A}{B}$

51. a) $\left(0, \frac{9}{10}\right)$, $\left(\frac{9}{4}, 0\right)$, $m = \frac{-2}{5}$ b) $\left(0, \frac{-5}{2}\right)$, $\left(\frac{5}{3}, 0\right)$, $m = \frac{3}{2}$

c) $\left(0, \frac{3}{5}\right)$, $\left(\frac{-3}{2}, 0\right)$, $m = \frac{2}{5}$