

Chapter 6 answers

6.1

1. Yes

3. No

5. Yes

7. $a = 0$

9. $c = -\frac{2}{3}$

11. $(-1, -5)$

13. $(4, 4)$

15. $(-\frac{3}{2}, 6)$

17. $(-2, -\frac{11}{3})$

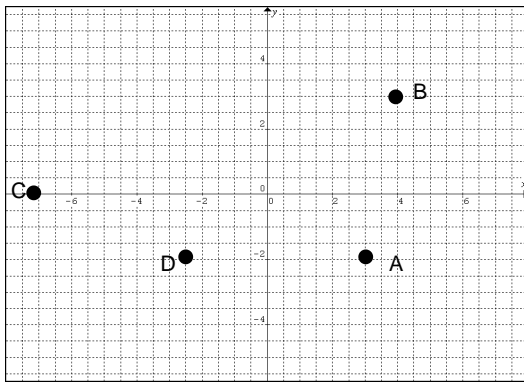
19.

x	y
-6	4
0	2
3	1
6	0

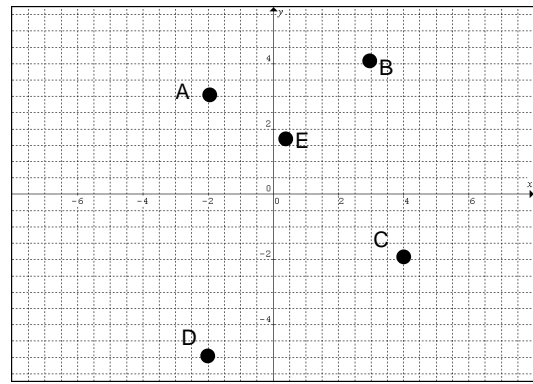
21.

x	y
-3	-4
9	4
0	-2
3	0

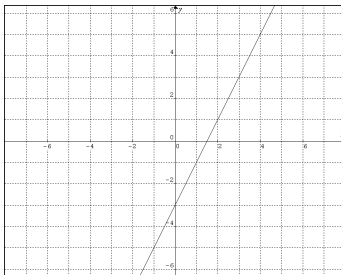
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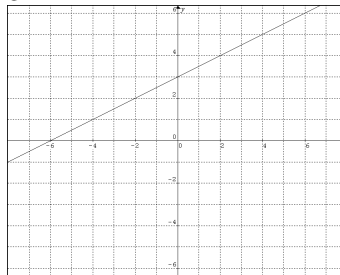
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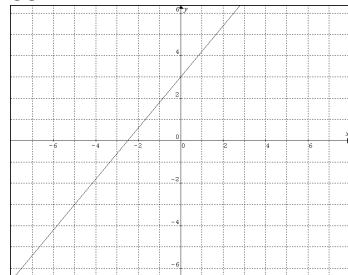
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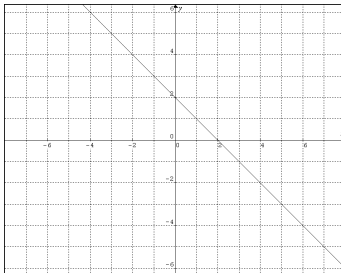
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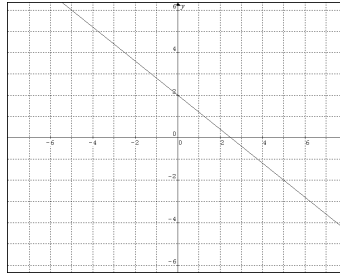
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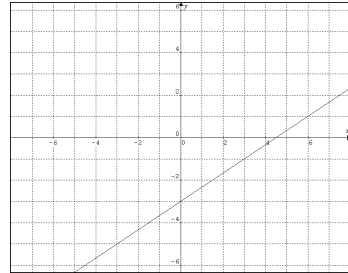
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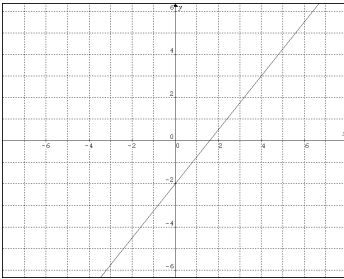
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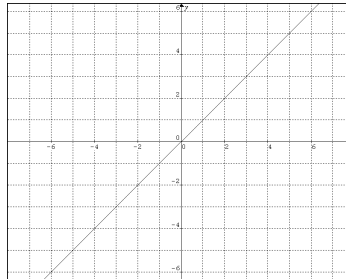
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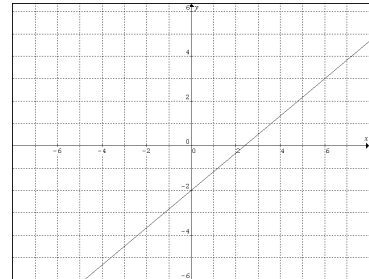
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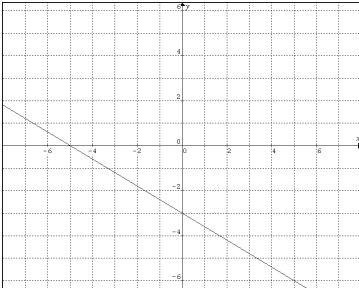
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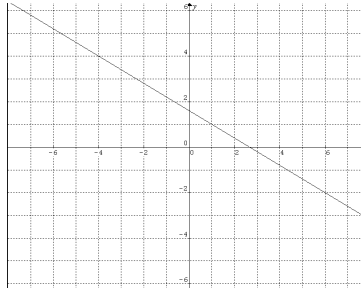
47.



41.



45.



6.2

1. (3, 0), (0, 2)

3. (-2, 0), (0, 4)

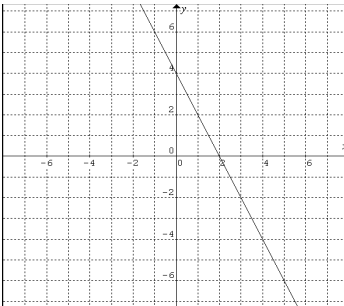
5. (8/3, 0), (0, 2)

7. (-4/7, 0), (0, -2)

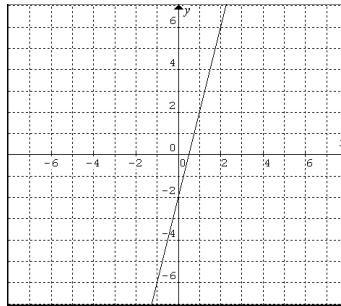
9. (4, 0), (0, -4)

11. No x-int, (0, -2)

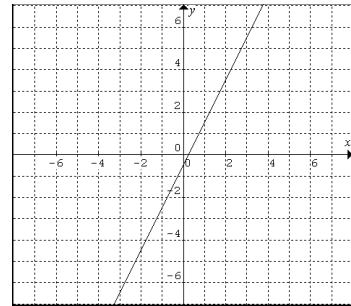
13.



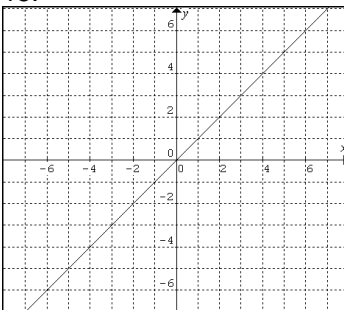
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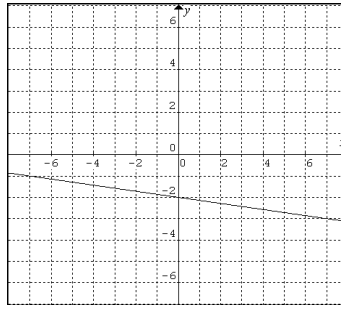
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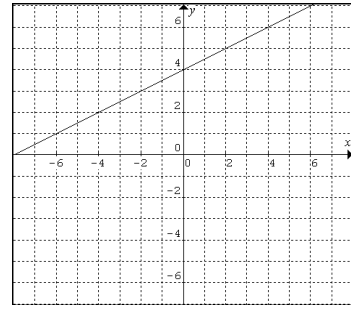
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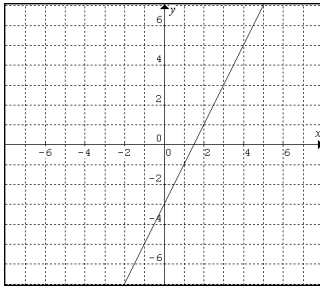
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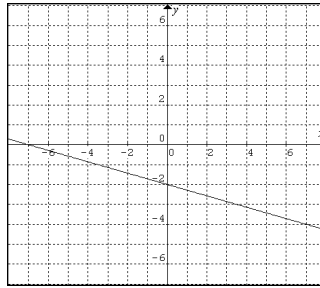
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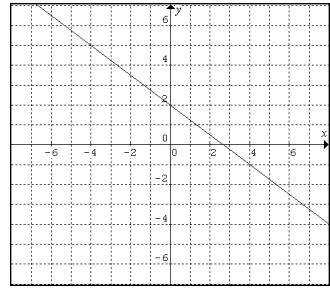
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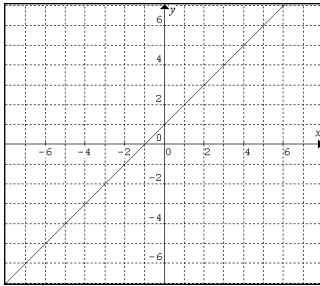
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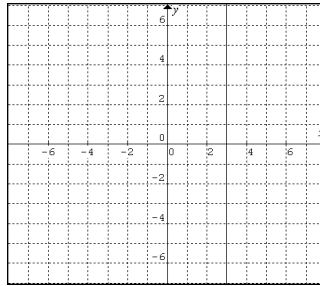
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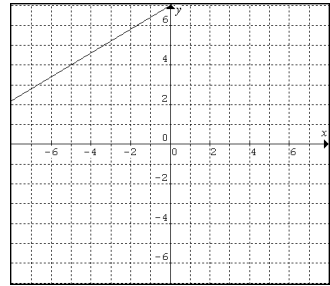
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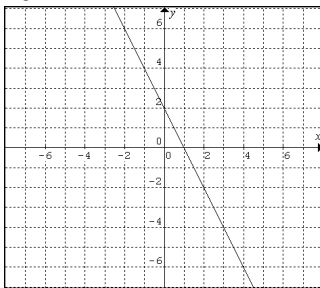
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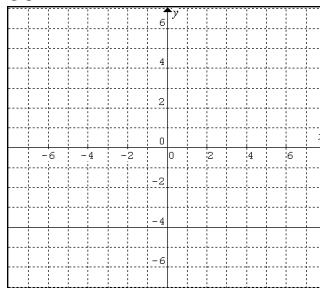
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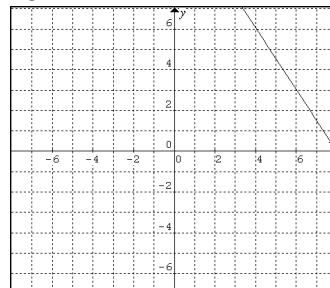
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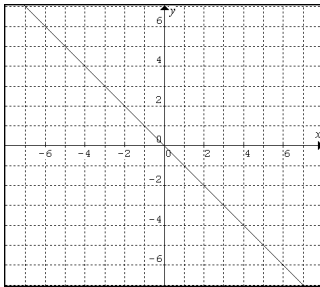
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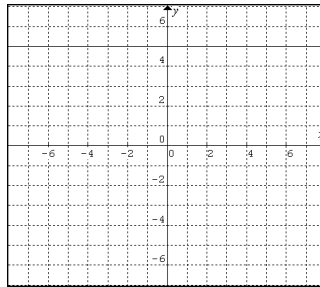
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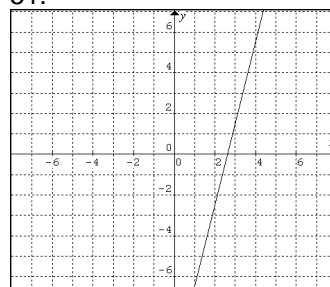
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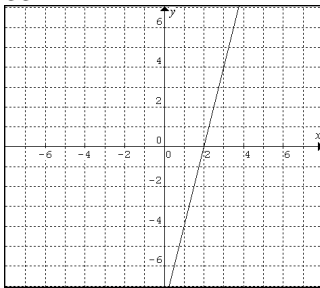
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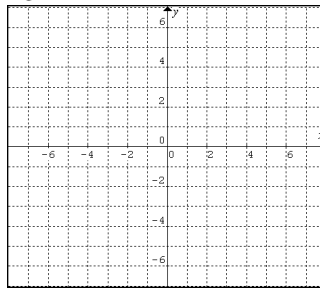
51.



33.

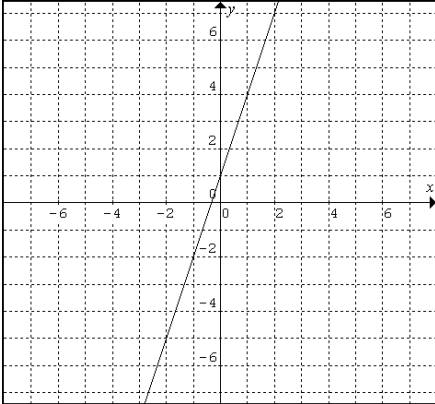


43.

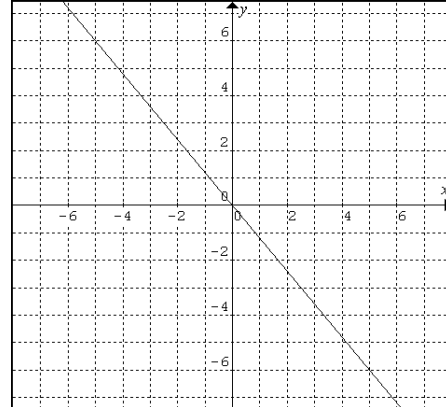


6.3

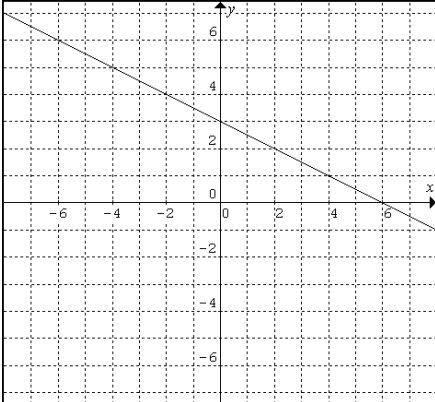
1. $m = 4$ 3. $m = 1$ 5. $m = \frac{9}{7}$ 7. $m = 0$ 9. $m = \text{undefined}$
11. $m = -\frac{7}{5}$ 13. $m = -2$ 15. $m = \frac{9}{5}$ 17. $m = -\frac{1}{b}$ 19. $m = 2a + h$
21. $m = -3$, y-int: (0, 2) 23. $m = -\frac{1}{2}$, y-int: (0, 5) 25. $m = \frac{3}{2}$, y-int: (0, 2)
27. $m = -\frac{7}{9}$, y-int: (0, -2) 29. $m = -1$, y-int: (0, $\frac{1}{3}$) 31. $m = \text{undef.}$, y-int: none
33. $m = 3$, x-int: ($-\frac{1}{3}$, 0), y-int: (0, 1)



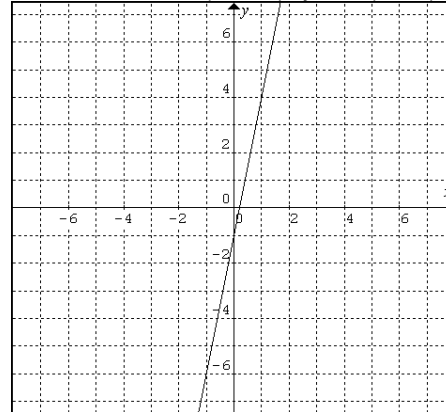
39. $m = -6/5$, x-int: (0, 0), y-int: (0, 0)



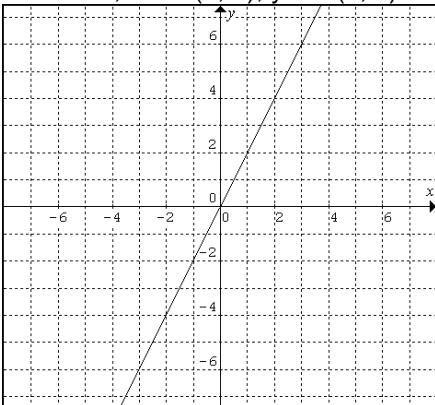
35. $m = -1/2$, x-int: (-6, 0), y-int: (0, 3)



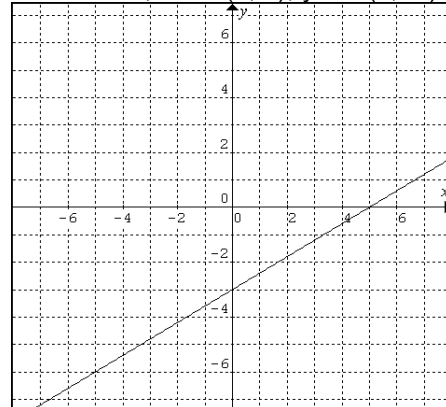
41. $m = 5$, x-int: ($\frac{1}{5}$, 0), y-int: (0, -1)



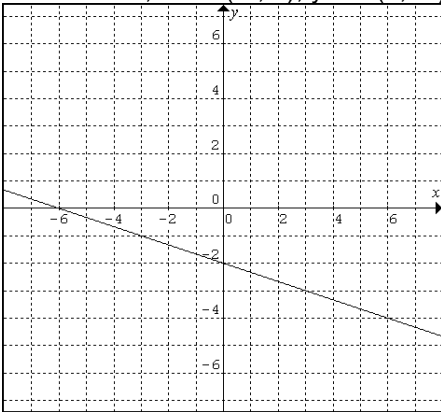
37. $m = 2$, x-int: (0, 0), y-int: (0, 0)



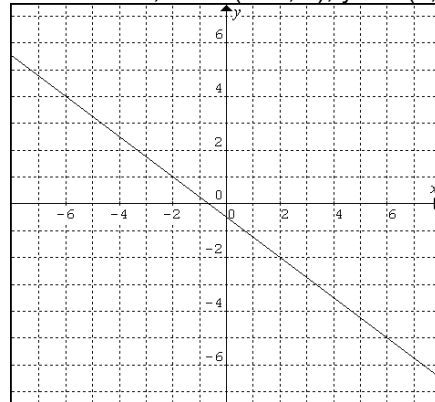
43. $m = 3/5$, x-int: (5, 0), y-int: (0, -3)



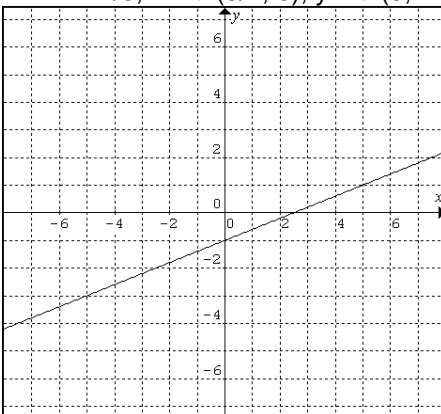
45. $m = -1/3$, x-int: $(-6, 0)$, y-int: $(0, -2)$



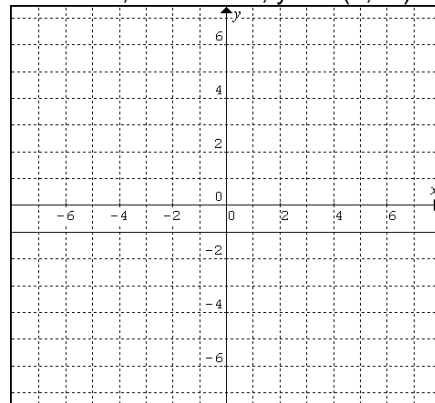
51. $m = -3/4$, x-int: $(-2/3, 0)$, y-int: $(0, -1/2)$



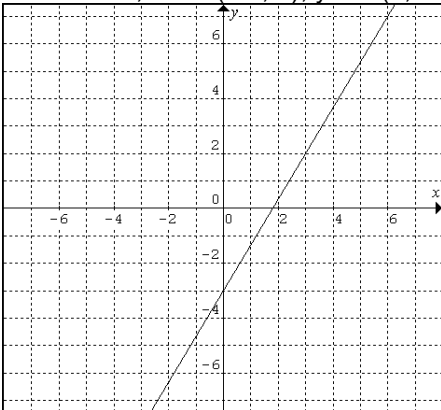
47. $m = 2/5$, x-int: $(5/2, 0)$, y-int: $(0, -1)$



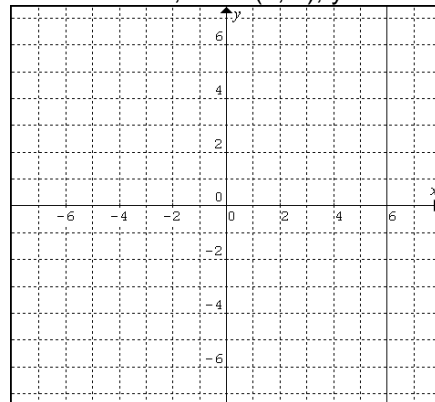
53. $m = 0$, x-int: none, y-int: $(0, -1)$



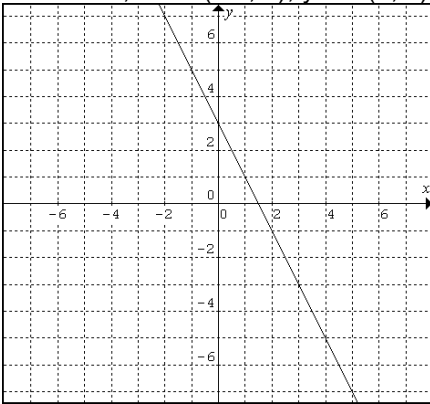
49. $m = 5/3$, x-int: $(9/5, 0)$, y-int: $(0, -3)$



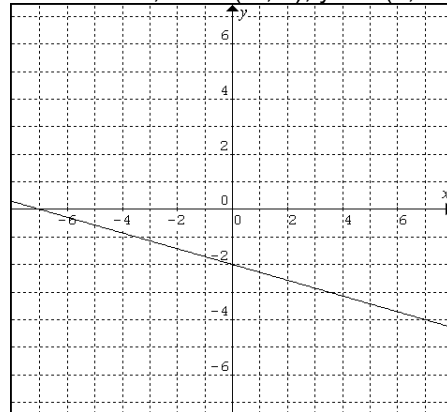
55. $m = \text{undef}$, x-int: $(6, 0)$, y-int: none



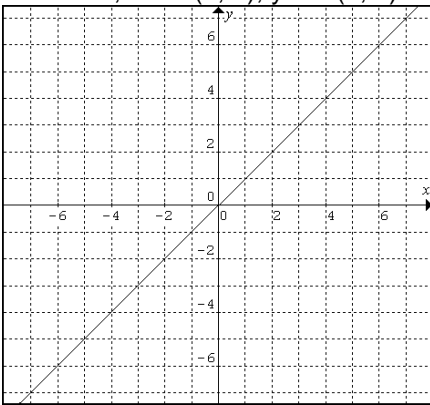
57. $m = -2$, x-int: $(\frac{3}{2}, 0)$, y-int: $(0, 3)$



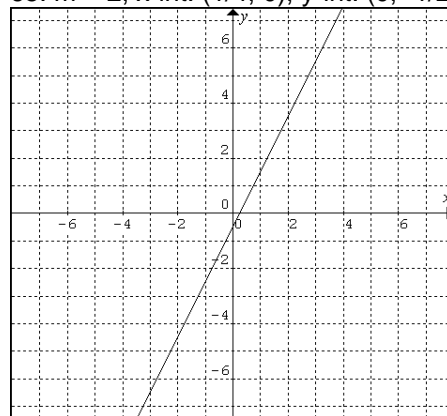
63. $m = -2/7$, x-int: $(-7, 0)$, y-int: $(0, -2)$



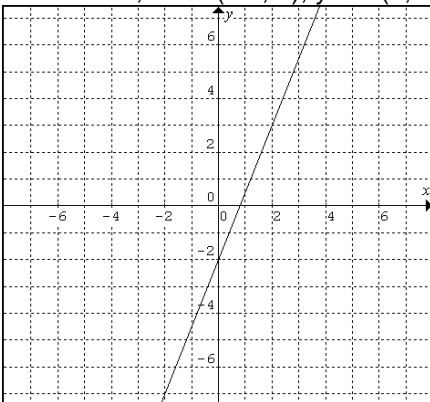
59. $m = 1$, x-int: $(0, 0)$, y-int: $(0, 0)$



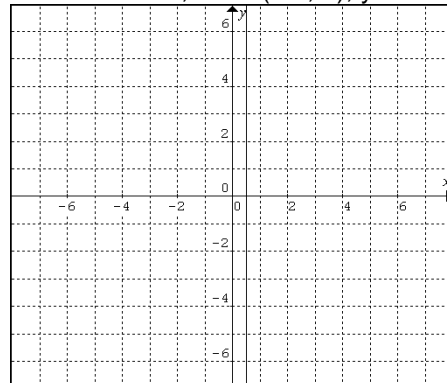
65. $m = 2$, x-int: $(\frac{1}{4}, 0)$, y-int: $(0, -1/2)$



61. $m = 5/2$, x-int: $(\frac{4}{5}, 0)$, y-int: $(0, -2)$

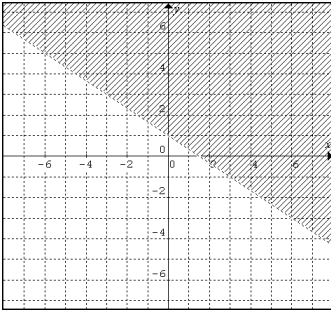


67. $m = \text{undef.}$, x-int: $(\frac{1}{2}, 0)$, y-int: none



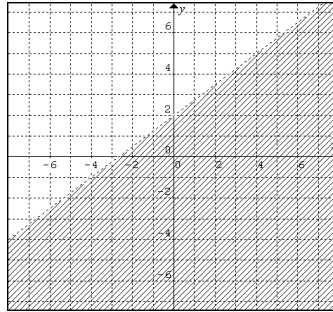
6.4

1. No
11.



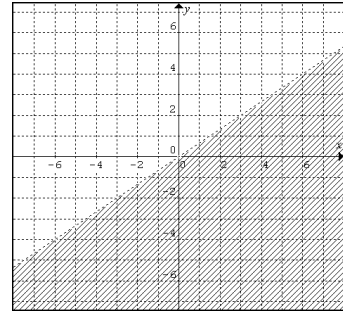
3. Yes

5. No
19.

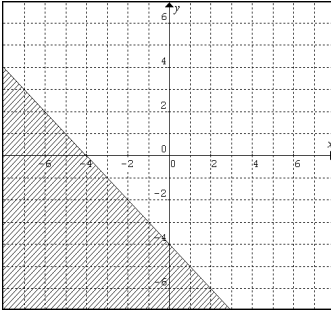


7. No

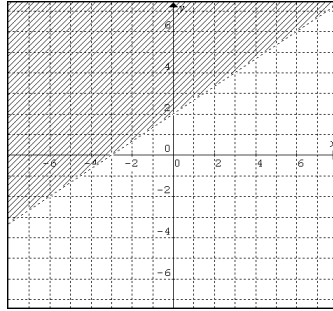
9. Yes
27.



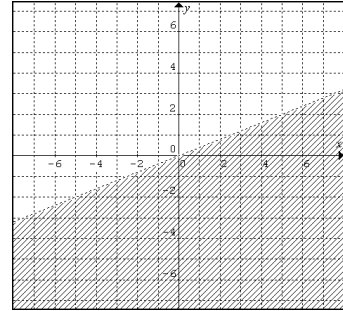
13.



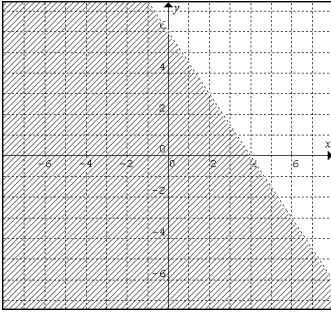
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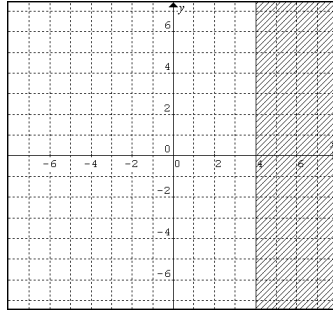
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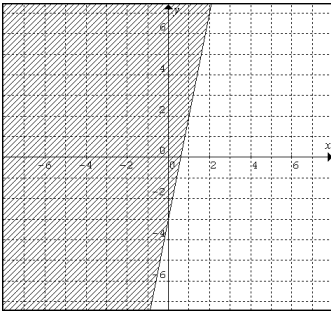
15.



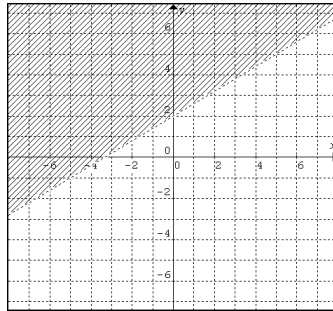
23.



17.



25.



6.5

1. $y = -2x + 3$

3. $y = -\frac{2}{3}x + 3$

5. $y = 3x - 6$

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

9. $y = -2x$

11. $y = 2$

13. $y = -2x + 11$

15. $y = -\frac{1}{3}x - 1$

17. $y = 2$

19. $y = 3.24x + 8.72$

21. $4x - y = 0$

23. $5x + 2y = -10$

25. $4x + y = 9$
33. $4x - y = -10$
41. $x - y = 0$
49. $3x + 2y = 3$
57. $5x - 2y = 3$
65. Collinear

27. $2x + 3y = 3$
35. $9x + 2y = 32$
43. $9x + 4y = 46$
51. $y = 0$
59. $3x + y = 0$

29. $18x - 3y = -13$
37. $y = -2$
45. $x - y = -3$
53. $2\pi x - y = 0$
61. $x - y = 3$

31. $x = 4$
39. $x - y = 10$
47. $8x + 7y = 11$
55. $3x + y = 2$
63. Not Collinear

6.6

1. Not Parallel
9. Parallel
17. Not Perpendicular
25. Parallel
33. $7x - 5y = 95$
41. $13x - 10y = -55$
49. $5x + 3y = 15$

3. Parallel
11. Perpendicular
19. Perpendicular
27. Neither
35. $5x + 3y = 57$
43. $5x - 6y = 31$
51. $3x + 5y = 9$

5. Not Parallel
13. Not Perpendicular
21. Perpendicular
29. Parallel
37. $3x - y = -9$
45. $7x + 5y = 28$
53. $x + 2y = 4$

7. Parallel
15. Perpendicular
23. Neither
31. $2x - 3y = 9$
39. $5y = -2$
47. $2x - y = -7$
55. Yes