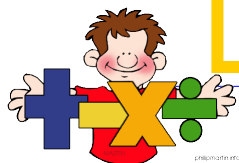


Math Connections



Math Course 3—Week 3 Answers

Multiple Representations 4.1.1—4.1.7 Answers

Answers

1.



Fig. 0

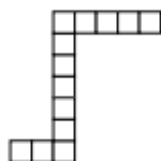


Fig. 4

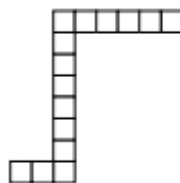
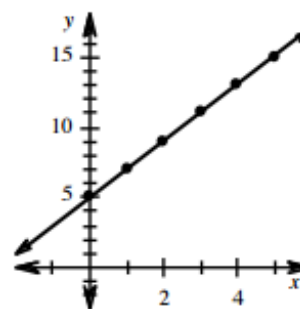


Fig. 5



The rule is $y = 2x + 5$. Figure 100 will have 205 tiles. It will have a base of three tiles, with 102 tiles extending up from the right tile in the base and 100 tiles extending to the right of the top tile in the vertical extension above the base.

Figure number (x)	0	1	2	3	4	5
Number of tiles (y)	5	7	9	11	13	15

2.



Fig. 0



Fig. 4

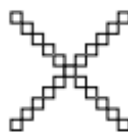
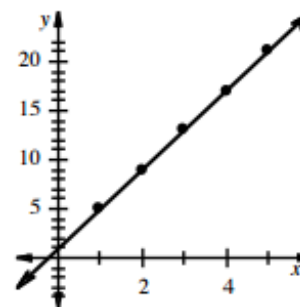


Fig. 5



The rule is $y = 4x + 1$. Figure 100 will have 401 tiles in the shape of an “X” with 100 tiles on each “branch” of the X, all connected to a single square in the middle.

Figure number (x)	0	1	2	3	4	5
Number of tiles (y)	1	5	9	13	17	21

3. $y = 3x - 2$

4. $y = -2x + 4$

5. $y = 2x - 3$

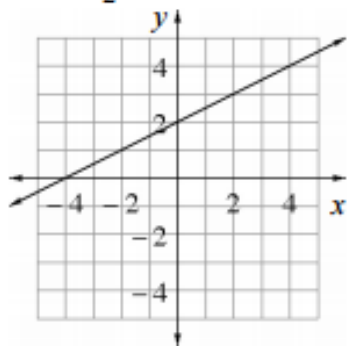
6. $y = -x$

Linear Graphs Using $y=mx+b$ 4.1.4—4.1.7 Answers

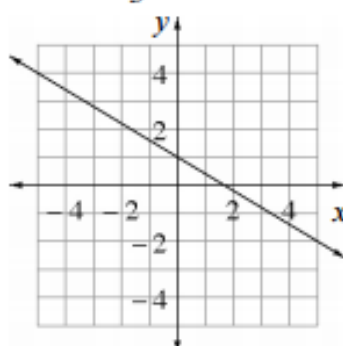
Answers

1. $-\frac{1}{2}$ 2. $\frac{3}{4}$ 3. -2 4. $\frac{4}{3}$
5. $-\frac{1}{7}$ 6. $\frac{1}{6}$ 7. $-\frac{4}{5}$ 8. 0
9. $\frac{3}{2}$ 10. $-\frac{35}{20} = -\frac{7}{4}$ 11. $\frac{41}{34}$ 12. $-\frac{33}{71}$
13. $\frac{1}{2}; (0, -2)$ 14. $-3; (0, -5)$ 15. $4; (0, 0)$ 16. $-\frac{2}{3}; (0, 1)$
17. $1; (0, -7)$ 18. $0; (0, 5)$ 19. $y = \frac{1}{2}x + 2$ 20. $y = \frac{2}{3}x - 4$
21. $y = -\frac{1}{3}$ 22. $y = -4x - 4$ 23. $3; y = 3x + 1$ 24. $-2; y = -2x + 3$
25. $\frac{2}{3}; y = \frac{2}{3}x + 1$ 26. $y = 2x - 2$ 27. $y = -x + 2$ 28. $y = \frac{1}{3}x + 2$
29. $y = -2x + 4$

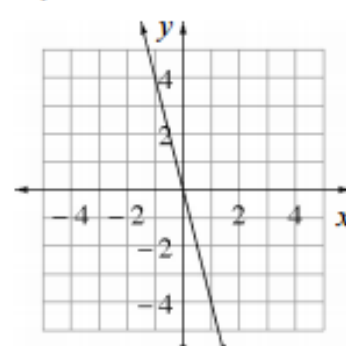
30. $y = \frac{1}{2}x + 2$



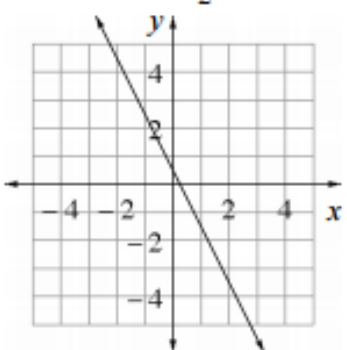
31. $y = -\frac{3}{5}x + 1$



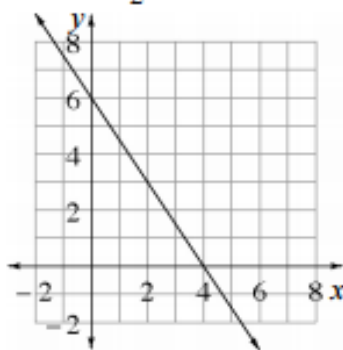
32. $y = -4x$



33. $y = -2x + \frac{1}{2}$



34. $y = -\frac{3}{2}x + 6$



Equations With Multiples 5.1.1 Answers

Answers (Other equivalent forms are possible.)

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

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

3. $w = -l + \frac{p}{2}$

4. $m = \frac{4n+1}{3}$

5. $a = \frac{c-b}{2}$

6. $a = \frac{c-b}{-2}$ or $\frac{b-c}{2}$

7. $p = q - 3$

8. $x = 4y - 4$

9. $r = \frac{7s}{3}$