

pp. 84-85 (#6-11, 13, 16-18, 26, 30-32)

6. Terms: $3z$, 4 , 2 , $4z$;
Like terms: $3z$ and $4z$, 4 and 2
7. Terms: $2n$, $-n$, -4 , $7n$;
Like terms: $2n$, $-n$, and $7n$
8. Terms: $-x$, $-9x^2$, $12x^2$, 7 ;
Like terms: $-9x^2$ and $12x^2$
9. Terms: $1.4y$, 5 , -4.2 , $-5y^2$, z ;
Like terms: 5 and -4.2
10. Terms: $\frac{1}{2}s$, -4 , $\frac{3}{4}s$, $\frac{1}{8}$, $-s^3$;
Like terms: $\frac{1}{2}s$ and $\frac{3}{4}s$,
 -4 and $\frac{1}{8}$
11. $2x^2$ is not a like term, because x is squared. The like terms are $3x$ and $9x$.
13. $11x + 2$
16. $14.2 - 5a$
17. $3 - \frac{1}{2}y$
18. $4b - 5$
26. $(20x + 25y)$ dollars
30. 14.5 in., 14.8 in., 15 in., 15.3 in., 15.8 in.
31. 0.52 m, 0.545 m, 0.55 m, 0.6 m, 0.65 m
32. C

pp. 90-91 (#8-11, 17, 32-33)

8. $2n - 4$

9. $2b + 9$

10. $-2w - 14$

11. $6x - 18$

17. $55w + 145$

32. $-\frac{7}{15}$

33. $\frac{2}{5}$

pp. 90-91 (#19-20, 25, 34-35)

19. $-3g - 4$

20. $9d + 3$

25. The -3 was not distributed to both terms inside the parentheses.

$$\begin{aligned}(4m + 9) - 3(2m - 5) &= 4m + 9 - 6m + 15 \\ &= 4m - 6m + 9 + 15 \\ &= -2m + 24\end{aligned}$$

34. $2\frac{2}{15}$

35. D

pp. 100-101 (#5-8, 21-25, 29, 41-44)

5. $a = 19$

6. $z = 5$

7. $k = -20$

8. $x = -18$

21. The 8 should have been subtracted rather than added.

$$\begin{array}{r} x + 8 = 10 \\ - 8 \quad - 8 \\ \hline x = 2 \end{array}$$

22. $n - 4 = -15; n = -11$

23. $c + 10 = 3; c = -7$

24. $y + (-3) = -8; y = -5$

25. $p - 6 = -14; p = -8$

29. $x + 8 = 12; 4 \text{ cm}$

41. -56

42. -72

43. -9

44. -6.5

pp. 106-107 (#7-12, 23-24, 26, 34, 41-44)

7. $h = 5$

8. $t = 9$

9. $n = -14$

10. $k = -27$

11. $m = -2$

12. $t = -4$

23. They should divide by -4.2 .

$$-4.2x = 21$$

$$\frac{-4.2x}{-4.2} = \frac{21}{-4.2}$$

$$x = -5$$

24. $\frac{x}{-9} = -16; x = 144$

26. $15x = -75; x = -5$

34. All of them except “multiply
each side by $-\frac{2}{3}$.”

41. -7

42. -9

43. 12

44. -9

pp. 112-113 (#6-9, 18-20, 22, 29, 32,42-45)

6. $v = -2$

7. $b = -3$

8. $k = 3\frac{4}{5}$

9. $t = -4$

18. The steps are out of order.

$$-6 + 2x = -10$$

$$2x = -4$$

$$\frac{2x}{2} = \frac{-4}{2}$$

$$x = -2$$

19. Each side should be divided by -3 , not 3.

$$-3x + 2 = -7$$

$$-3x = -9$$

$$\frac{-3x}{-3} = \frac{-9}{-3}$$

$$x = 3$$

20. $g = -5$

22. $z = -\frac{1}{4}$

29. $v = -5$

32. $x = -1$

42. -34.72

43. $-6\frac{2}{3}$

44. $-3\frac{1}{8}$

45. 6.2

pp. 115-117 (1-4, 7, 10, 16-19, 25-26, 28-29, 32, 33-34, 37) AND p. 114 (9,12)

1. Terms: z , 8 , $-4z$;

Like terms: z and $-4z$

2. Terms: $3n$, 7 , $-n$, -3 ;

Like terms: $3n$ and $-n$,
 7 and -3

3. Terms: $10x^2$, $-y$, 12 , $-3x^2$;

Like terms: $10x^2$ and $-3x^2$

4. $-4h$

7. $3q + 21$

10. $4c + 5$

16. $p = -1$

17. $q = -5$

18. $j = -20$

19. $b = 8$

25. $y = -49$

26. $z = 3$

28. $x = -2$

29. $y = -5$

32. -16°F

33. $c = 7$

34. $w = -\frac{8}{9}$

37. 11 years

9. $x + 22.3 = 26$; $x = 3.7$

12. $x - 29.79 = -20.51$; \$9.28

pp. 128-129 (#6-12, 17-20, 22-23, 29-32)

6. $y \leq -8$

7. $w + 2.3 > 18$

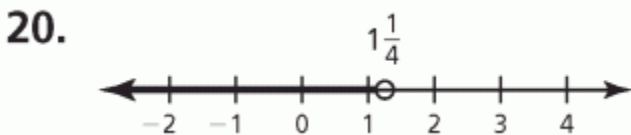
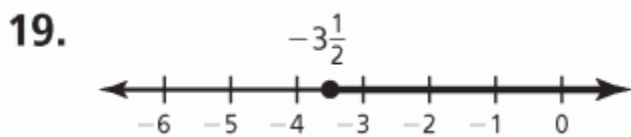
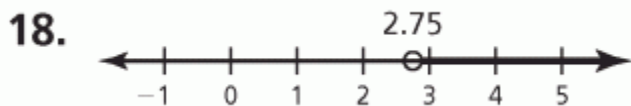
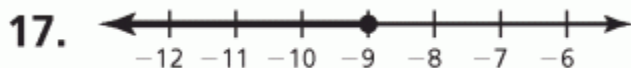
8. $-4t \geq -\frac{2}{5}$

9. $b - 4.2 < -7.5$

10. The inequality symbol is reversed;
 $2x \leq -24$

11. yes

12. no



22. no

23. yes

29. $p = 11$

30. $w = -3.6$

31. $x = -7$

32. C

pp. 134-135 (#4, 7-9, 18, 29-33)

(33 exercises.)

Display Cols

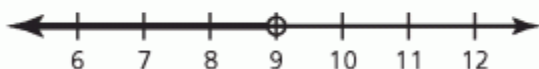
4. $a > 6$;



7. $-6 < y$;



8. $n < 9$;



9. $t \leq -2$;



18. The 2 should have been subtracted rather than added.

$$\begin{array}{r} x - 7 > -2 \\ + 7 \quad + 7 \\ \hline x > 5 \end{array}$$



29. $x = 9$

30. $w = -27$

31. $b = -22$

32. $h = 80$

33. A

pp. 134-135 (#3, 5-6, 19, 21-23)

3. $x \geq 11$;



5. $-4 \leq g$;



6. $k \leq -11$;



19. The wrong side of the number line is shaded.



21. $7 + 7 + x < 28$; $x < 14$ ft

22. $x + 3 > 8$; $x > 5$ in.

23. $8 + 8 + 10 + 10 + x \leq 51$;
 $x \leq 15$ m

pp. 143-145 (#10-18, 20-22, 39-40)

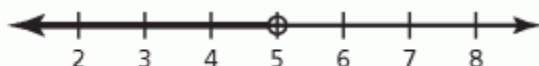
10. $n > 10$;



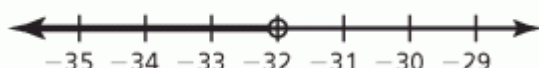
11. $c \leq -36$;



12. $m < 5$;



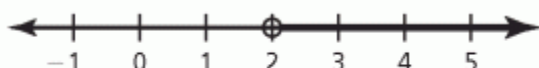
13. $x < -32$;



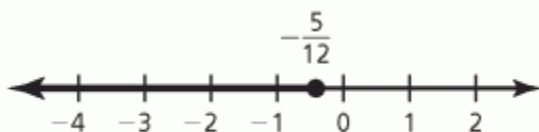
14. $w \geq 15$;



15. $k > 2$;



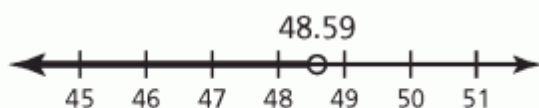
16. $x \leq -\frac{5}{12}$;



17. $y \leq -3$;



18. $b < 48.59$;



20. $\frac{x}{4} \leq 5; x \leq 20$

21. $\frac{x}{7} < -3; x < -21$

22. $6x \geq -24; x \geq -4$

39. $10x \geq 120; x \geq 12 \text{ cm}$

40. $4x < 20; x < 5 \text{ ft}$

pp. 143-145 (#19, 24, 27-35, 48-52)

- 19.** The inequality sign should not have been reversed.

$$\frac{x}{3} < -9$$

$$3 \cdot \frac{x}{3} < 3 \cdot (-9)$$

$$x < -27$$

24. $9.2x \geq 299; x \geq 32.5$ h

27. $n \geq -3;$



28. $w < -7;$



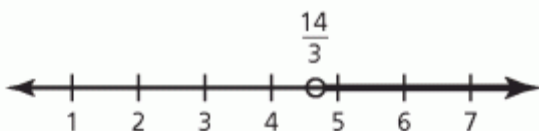
29. $h \leq -24;$



30. $x < 45;$



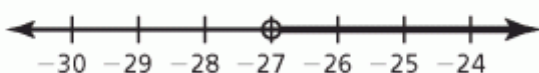
31. $y > \frac{14}{3};$



32. $d \leq -13;$



33. $m > -27;$



34. $k \geq -9$;



35. $b > 6$;



48. $w = 8$

49. $v = 45$

50. $x = 7$

51. $m = 4$

52. B

pp. 218-219 (#7-10, 26-29, 31, 35, 36, 38 a-c, 43-47)

- 7. 0.78
- 8. 0.55
- 9. 0.185
- 10. 0.574
- 26. 12.8%
- 27. 368%
- 28. 512%
- 29. 3.71%
- 31. The decimal point was moved in the wrong direction. $0.\underline{8}6 = 0.86 = 86\%$
- 35. $\frac{9}{25} = 0.36$
- 36. $\frac{47}{200} = 0.235$
- 38. a. car: 0.2, school bus: 0.48, bicycle: 0.08
- b. car: $\frac{1}{5}$, school bus: $\frac{12}{25}$,
bicycle: $\frac{2}{25}$
- c. 24%
- d. *Answer should include, but is not limited to:* A bar graph showing either the *number* of students or the *portion* of students in the class that get to school in various ways.

43. $\frac{31}{100}$

44. $2\frac{1}{5}$

45. $4\frac{8}{25}$

46. $-5x + 3$

47. $-1.6n - 1$

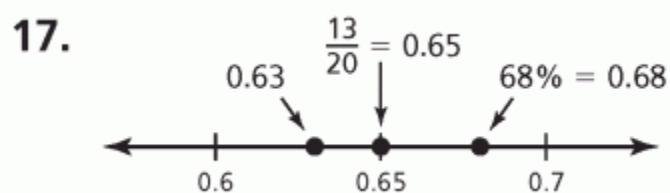
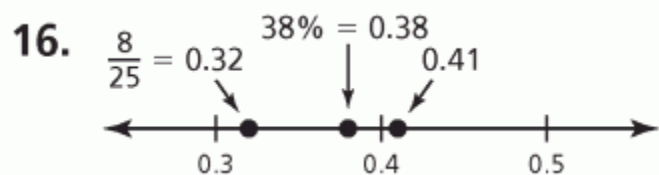
pp. 224-225 (#4-7, 16-17, 22, 31, 33-36)

4. 95%

5. 20%

6. $\frac{37}{50}$

7. $\frac{13}{25}$



22. yes

31. See *Taking Math Deeper*.

33. yes

34. no

35. yes

36. D

pp. 150-151 (#3-7, 11-13, 19, 25-27)

Book

Chapter

Section

Exercises (27 exercises.)

Display Cols

3. C

4. A

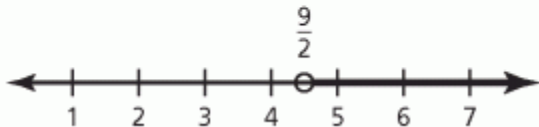
5. $y < 1$;



6. $p \geq -4$;



7. $h > \frac{9}{2}$;



11. They did not perform the operations in the proper order.

$$\frac{x}{3} + 4 < 6$$

$$\frac{x}{3} < 2$$

$$x < 6$$

12. $g > -1$;



13. $w \leq 3$;



19. $x \geq 4$;



25.

Flutes	7	21	28
Clarinets	4	12	16

7 : 4, 21 : 12, and 28 : 16

26.

Boys	6	3	30
Girls	10	5	50

6 : 10, 3 : 5, and 30 : 50

27. A

p. 156 (#1-15)

3. C

4. A

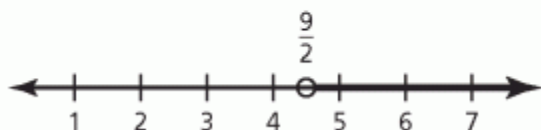
5. $y < 1$;



6. $p \geq -4$;



7. $h > \frac{9}{2}$;



11. They did not perform the operations in the proper order.

$$\frac{x}{3} + 4 < 6$$

$$\frac{x}{3} < 2$$

$$x < 6$$

12. $g > -1$;



13. $w \leq 3$;



19. $x \geq 4$;



25.

Flutes	7	21	28
Clarinets	4	12	16

7 : 4, 21 : 12, and 28 : 16

26.

Boys	6	3	30
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6 : 10, 3 : 5, and 30 : 50

27. A