

ANSWERS TO EXERCISES AND ASSESSMENTS

CHAPTER 1

Exercises 1.1

1. 6, 7 2. 7, 2, 8 3. 600 4. 10,000
 5. 500,000 6. The value of 5 in 500,000 is 10 times the value of 5 in 50,000. It is moved to the right by dividing by 10. 7. 79, 97 8. 431, 413, 341, 314, 134, 143 9. 2,975 10. 256 11. 805
 12. 9,999 13. 2,703 14. 6050

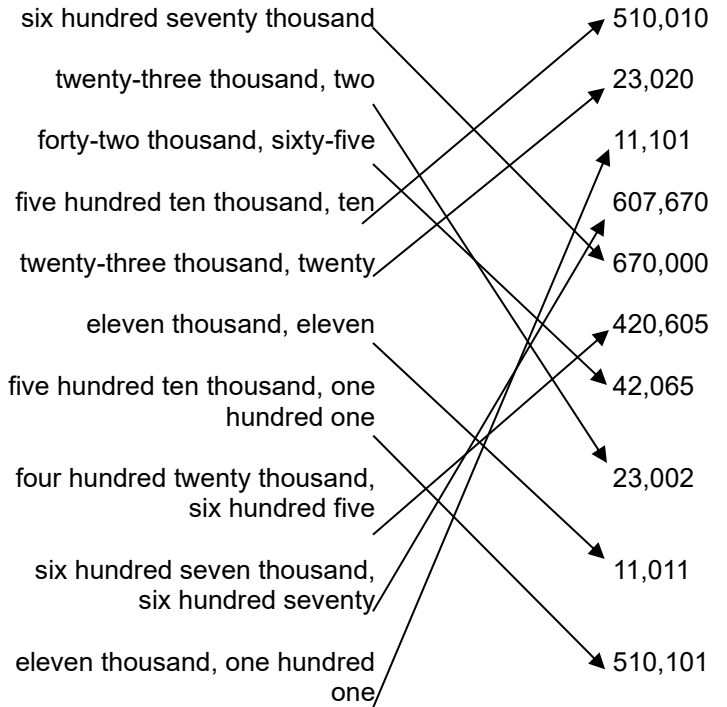
	hundred thousands	ten thousands	thousands	hundreds	tens	ones
15.		5	9,	0	5	2
16.				2	0	6
17.			6,	3	0	0
18.	2	3	5,	1	0	6
19.				3	1	0
20.					4	2
21.		7	7,	0	0	7

22. 6,023 23. 360 24. 65,028 25. 12,203
 26. 425,055

Exercises 1.2

1. one hundred six 2. sixty-seven
 3. four thousand, seven hundred sixty-two
 4. six thousand, nine hundred twelve
 5. twenty-four thousand, seven hundred ninety-three 6. eighty-two thousand, five hundred sixty-one 7. 812 8. 621
 9. 7,503 10. 1,061 11. 25,642
 12. 82,905

13.



15. $40,000 + 4,000 + 400 + 30 + 3$
 16. $60,000 + 8,000 + 50 + 6$
 17. $300,000 + 50,000 + 8,000 + 500 + 6$
 18. $900,000 + 90,000 + 9,000 + 900 + 90$

Exercises 1.3

1. > 2. < 3. < 4. > 5. > 6. > 7. <
 8. < 9. 450 10. 1,999 11. 44,803
 12. 1,110 13. 34,011 14. 110,090
 15. bridge 16. dog 17. tree 18. car
 19. 65,099 20. 7,519

Exercises 1.4

1. 207, 165, 156 2. 3,155, 3,090, 3,033
 3. 94,700, 89,950, 80,998 4. 50,100, 50,005, 49,888 5. 445,342, 445,209, 444,444, 430,990 6. 139, 240, 268
 7. 1,029, 1,034, 11,040
 8. 44,008, 44,990, 45,000, 45,010

Exercises 1.5

1. 3,000 2. 3,000 3. 7,000 4. 400
 5. 6,300 6. 4,500 7. 20 8. 50 9. 2,620

#'s	Nearest ten	Nearest hundred	Nearest thousand
10. 3,934	3,930	3,900	4,000
11. 6,176	6,180	6,200	6,000
12. 4,021	4,020	4,000	4,000
13. 5,687	5,690	5,700	6,000
14. 816	820	800	1,000

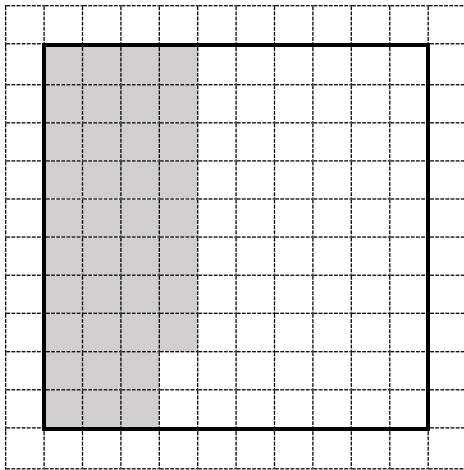
15. a) 1,300 b) 1,270 16. a) 2,800
 b) 3,000 17. 3,499, 3,200, 2,650
 18. 59, 75, 64, 140, 128 19. 527, 533

Exercises 1.6

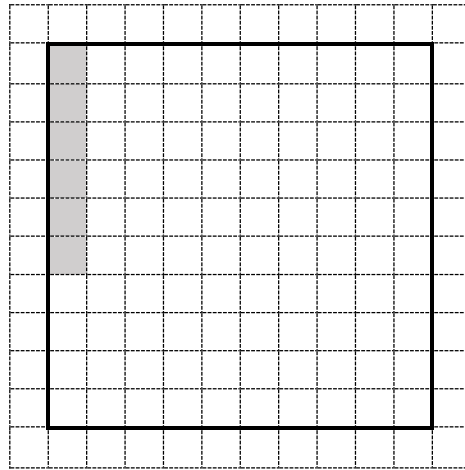
1. 80,000 2. 80,000 3. 150,000
 4. 520,000 5. 200,000 6. 100,000
 7. 500,000 8. 400,000 9. a) 240,000
 b) 200,000

Exercises 1.7

1. thirty-seven and nine tenths
 2. one hundred and sixty-two hundredths
 3. three thousand one hundred fifty and forty-five hundredths
 4. one thousand two hundred thirty-three and five tenths
 5. three thousand and twenty-three hundredths
 6. seventeen and one tenth
 7. 230.3 8. 1,247.19 9. 3,850.05
 10. 2,023.72 11. 1,229.9 12. 57.4
 13. 4.53 14. 0.61
 15.



16.



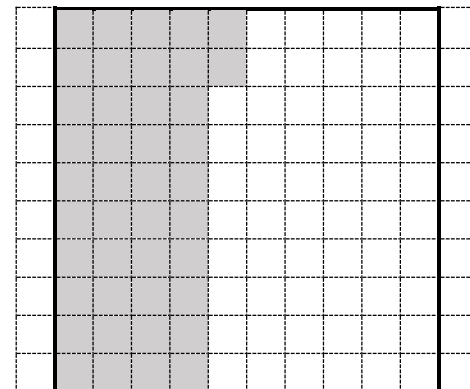
17. 0.75 18. 0.29 19. 0.68 20. 0.32
 21. 0.24 22. 0.79 23. 0.17

Exercises 1.8

1. 0.2, 0.3, 0.6, 0.8, 0.9, 1
 2. 5, 5.1, 5.6, 5.7, 5.8
 3. 21, 21.4, 21.7, 22
 4. 8.81, 8.84, 8.85, 8.86, 8.88, 8.89
 5. < 6. < 7. < 8. 0.3, 0.32, 0.36
 9. 7.35, 7.38, 7.4, 7.42
 10. 13.1, 13.1, 13.2

Self Assessment – Chapter 1

1. 62,892 2. 10 3. 81, 18 4. 14,735
 5. Seven thousand one hundred eighty-four
 6. a) > b) < c) < d) > 7. 2,510, 2,157, 2,155
 8. 5,800 9. a) fourteen and two tenths
 b) one hundred thirty-two and eighty-five hundredths
 10. a) 527.9
 b) 2433.25
 11.



Answers

12. 0.21 13. No, should be \$13,089
14. a) 0.95 b) 0.76 c) 0.53 d) 0.21
15. a) 0.3, 0.5, 0.9 b) 0.71, 0.74, 0.78

Performance Task – Chapter 1

A = 205,347 B = 25,506
C = 768,059 D = 13,298
E = 154,057.3 F = 232,564
Ordered = D, B, E, A, F, C

CHAPTER 2

Exercises 2.1

1. 69 2. 88 3. 699 4. 778 5. 875
6. 334 7. 86 8. 65 9. 568 10. 1,364
11. 1,178 12. 777 13. 922 14. 8,603
15. 688 16. 729 17. 621 18. 731
19. 6,029 20. 1,821

Exercises 2.2

1. 101 2. 94 3. 1,025 4. 162 5. 1,568
6. 1,138 7. 176 8. 153 9. 1,541
10. 1,173 11. 2,299 12. 5,711

Exercises 2.3

1. 48 2. 35 3. 63 – 35 4. 78 – 54 5. 31
6. 53 7. 16

Exercises 2.4

1. 26 2. 732 3. 53 4. 432 5. 212
6. 1,222 7. 820 8. 254 9. 841 10. 455
11. 3,151 12. 5,322 13. 3,361 14. 5,121

Exercises 2.5

1. 18 2. 649 3. 34 4. 365 5. 138
6. 258 7. 292 8. 286 9. 129 10. 1,118
11. 4,358 12. 2,383 13. 1,793 14. 1,972

Exercises 2.6

1. 95 2. 2,431 3. 657 4. 665 5. 55
6. 643 7. 2,260 meters 8. 46 kilometers
9. a) 27 b) 9 10. 15 11. 208

Self Assessment – Chapter 2

1. a) D b) C c) A d) B 2. Incorrect,
should be 16,500 3. a) 1,144 b) 10,382

4. 50 – 21 5. a) 484 b) 3,015 c) 133
d) 1,328 6. a) A b) C 7. a) 79 miles
b) 96 miles

Performance Task – Chapter 2

1. 4,375 2. Jayda 3. 419 4. 8,331
5. 1,152 6. 4,107 7. 268 8. 151

CHAPTER 3

Exercises 3.1

1. 15.7 2. 137.1 3. 102.56 4. 72.5
5. 11,821.69 6. 83.75 7. 449.55
8. 5,190.31 9. 161.23 10. 620.61
11. 1,313.46 12. 2,202.43 13. 8,087.95

Exercises 3.2

1. 0.14 2. 0.34 3. 0.55 – 0.36
4. 0.68 – 0.38 5. 0.40 – 0.16

Exercises 3.3

1. 10.2 2. 3.62 3. 12.52 4. 30.4
5. 12.53 6. 66.43 7. 13.22 8. 50.52
9. 52.24 10. 23.42 11. 5.15 12. 17.2
13. 12.31 14. 53.4 15. 21.55 16. 64.64
17. 1,131.2 18. 9,011.32 19. 5,221.22
20. 2,230.42

Exercises 3.4

1. 5.7 2. 2.92 3. 8.72 4. 3.8 5. 8.04
6. 9.88 7. 12.54 8. 49.42 9. 5.07
10. 18.8 11. 69.14 12. 7.56 13. 3.94
14. 30.57 15. 1.29 16. 3.83 17. 6.12
18. 23.13

Exercises 3.5

1. a) \$41.50 b) \$8.50 2. a) 1.46 liters
b) 0.54 liters 3. \$8.50 4. \$9.49
5. a) \$17.62 b) \$12.38

Self Assessment – Chapter 3

1. a) A b) B 2. a) 4,959.61 b) 18,344.02
3. 0.76 – 0.54 4. 595.14 5. Sofia is
correct. 6. 3.51 inches

Performance Task – Chapter 3

1. \$52 2. \$11.41 3. \$15.59 4. \$3.00

CHAPTER 4

Exercises 4.1

1. a) 16, 24, 28 b) 21, 35, 42 c) 42, 54
 d) 27, 54, 63 e) 32, 40, 64, 72
 f) 10, 16, 18, 20 g) 25, 40, 45
 2. a)

×	4	6	8	10
3	12	18	24	30
2	8	12	16	20
1	4	6	8	10
5	20	30	40	50

b)

×	3	7	9	8
2	6	14	18	16
5	15	35	45	40
3	9	21	27	24
7	21	49	63	56

c)

×	4	7	8	2
4	16	28	32	8
6	24	42	48	12
9	36	63	72	18
5	20	35	40	10

d)

×	1	3	4	6
2	2	6	8	12
5	5	15	20	30
7	7	21	28	42
9	9	27	36	54

e)

×	4	7	9	0
1	4	7	9	0
3	12	21	27	0
6	24	42	54	0
7	28	49	63	0

f)

×	0	1	5	9
1	0	1	5	9
9	0	9	45	81
0	0	0	0	0
7	0	7	35	63

3. a) 15 b) 16 c) 14 d) 30 e) 32
 f) 27 g) 42 h) 56 i) 99 j) 50

4.

7	×	7	=	49		45
6	×	6	=	36		56
8	×	4	=	32		24
5	×	9	=	45		20
7	×	3	=	21		49
3	×	6	=	18		36
6	×	9	=	54		35
9	×	7	=	63		42
5	×	4	=	20		32
7	×	8	=	56		18
8	×	3	=	24		21
5	×	7	=	35		63
7	×	6	=	42		54

Exercises 4.2

1. a) $5 \times 4 = 20$ b) $3 \times 2 = 6$ c) $2 \times 7 = 14$
 d) $3 \times 3 = 9$ e) $4 \times 8 = 32$ f) $6 \times 1 = 6$
 2. a) $1 + 1 + 1 = 3$ b) $2 + 2 + 2 + 2 = 8$
 c) $9 + 9 = 18$ d) $6 + 6 + 6 + 6 + 6 = 30$
 e) $8 + 8 + 8 = 24$ f) $10 + 10 + 10 + 10 + 10 + 10 = 60$
 3. a) $5 \times 5 = 25$ b) $3 \times 12 = 36$
 c) $9 \times 5 = 45$ d) $9 \times 3 = 27$ e) $8 \times 6 = 48$
 f) $7 \times 8 = 56$ 4. D 5. A 6. C

Exercises 4.3

1. 40 2. 60 3. 80 4. 30 5. 300 6. 900
 7. 400 8. 200 9. 5,000 10. 2,000
 11. 9,000 12. 8,000 13. 120 14. 140
 15. 100 16. 280 17. 600 18. 2,100
 19. 4,000 20. 4,500 21. 4,200 22. 1,200
 23. 25,000 24. 14,000 25. 18,000
 26. 56,000 27. 27,000 28. 48,000 29. C
 30. A 31. C 32. C 33. D

Exercises 4.4

1. a) 75 b) 48 c) 132 d) 273 2. a) 112
 b) 224 c) 175 d) 270 3. a) 320 b) 84

Answers

c) 315 d) 288 4. 112 5. 96

Exercises 4.5

1. a) 675 b) 5000 c) 12,750 d) 2,373
 2. a) 2,512 b) 1,824 c) 11,163
 3. a) 6,147 b) 1,544 c) 1,755 d) 4,470
 e) 24,772

Exercises 4.6

1. a) 60 b) 430 c) 120 d) 810 e) 720
 f) 150 2. a) 2,400 b) 4,500 c) 800
 d) 1,200 e) 800 f) 2,000

Exercises 4.7

1. a) 315 b) 504 c) 319 2. a) 456
 b) 364 c) 512 d) 1,025 3. a) 464
 b) 1,426 c) 1,961 4. 768

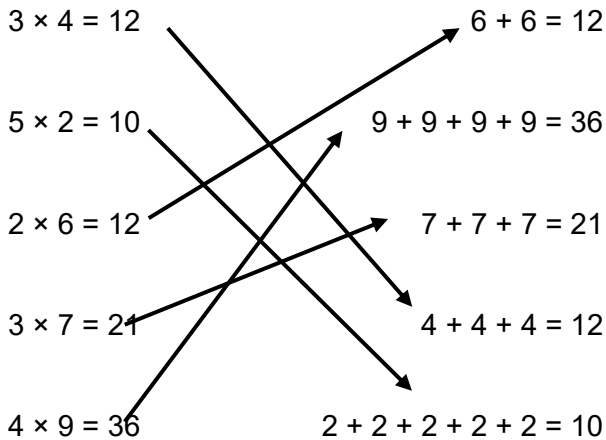
Exercises 4.8

1. 210 tickets 2. 48 miles 3. 50 pop
 bottles 4. \$196 5. 102 comic books
 6. Jeong-Hyeok \$72, Erica \$144
 7. 48 candies

Self Assessment – Chapter 4

1. a) A b) D c) C

2.



3. a) B b) C c) D d) C e) C
 4. a) 312 b) 2,295 5. a) 3,138 b) 8,295
 6. Did not place a zero at the end of the
 second product line. 7. 1,457 8. a) 3,588
 b) 988

Performance Task – Chapter 4

1. 32 wings 2. 84 legs 3. 492 body parts
 4. 34,152 legs 5. 555 bee parts

CHAPTER 5

Exercises 5.1

1. a) $36 \div 12 = 3$ or $36 \div 3 = 12$
 b) $44 \div 4 = 11$ or $44 \div 11 = 4$
 2. $5 \times 3 = 15$, $15 \div 5 = 3$
 3. a) 3 apples each, 1 remainder
 b) 2 cookies each, 3 remainders
 c) 2 oranges each, 5 remainders
 d) 2 candies each, 1 remainder
 e) 2 apples each, 2 remainders
 f) 3 cookies each, 2 remainders

Exercises 5.2 (Answers may vary.)

1. a) 2 b) 3 c) 7 d) 10 e) 7
 2. a) 60 b) 90 c) 120 d) 800 e) 700

Exercises 5.3

1. a) $35 \div 5 = 7$ b) $21 \div 7 = 3$
 c) $40 \div 5 = 8$ d) $39 \div 4 = 9 R3$

2. a)

○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○

○	○	○
---	---	---

b)

○	○	○	○	○	○	○
○	○	○	○	○	○	○
○	○	○	○	○	○	○
○	○	○	○	○	○	○
○	○	○	○	○	○	○

○	○
---	---

3. a) 14 b) 19 4. a) $162 \div 6 = 27$
 b) $108 \div 9 = 12$ 5. a) 5 R3 b) 12 R1
 c) 13 R3 d) 28 R4 e) 14 f) 56 g) 42 R6
 h) 63 i) 391 R3 j) 1912

Exercises 5.4

1. 29 cans 2. 22 cookies 3. \$4 per pair of socks 4. 23 cards 5. 18 candies
6. About 9 or 10 trips

Exercises 5.5

1. a) 1, 2, 3, 6, 9, 18
b) 1, 2, 3, 6, 9, 18, 27, 54
c) 1, 2, 4, 8, 16, 32
d) 1, 2, 31, 62 e) 1, 7, 11, 77
f) 1, 2, 47, 94 g) 1, 2, 4, 7, 14, 28
h) 1, 47 i) 1, 3, 9, 27, 81 j) 1, 3, 13, 39
2. a) (1, 21), (3, 7)
b) (1, 36), (2, 18), (3, 12), (4, 9), (6, 6)
c) (1, 42), (2, 21), (3, 14), (6, 7)
d) (1, 75), (3, 25), (5, 15) e) (1, 57), (3, 19)
f) (1, 93), (3, 31) g) (1, 11) h) (1, 67)

Exercises 5.6

1. No 2. Yes 3. No 4. 9, 15, 18, 24
5. 7, 21, 28, 35 6. 6, 12, 24, 30, 36

Exercises 5.7

1. (1, 3) Prime 2. (1, 2) Prime
3. (1, 8), (2, 4) Composite
4. (1, 11) Prime 5. (1, 21), (3, 7) Composite
6. (1, 42), (2, 21), (3, 14), (6, 7) Composite
7. (1, 67) Prime
8. (1, 36), (2, 18), (3, 12), (4, 9), (6, 6) Composite
9. (1, 57), (3, 19) Composite
10. (1, 75), (3, 25), (5, 15) Composite
11. (1, 31) Prime 12. (1, 93), (3, 31) Composite
13. 17, 13, 7, 1, 3, 2, 23, 11, 29

Self Assessment – Chapter 5

1. B 2. Yes 3. 4 4. a) $15 \div 5 = 3$
b) $25 \div 5 = 5$ 5. 17 6. a) 57 R3
b) 358 R3 7. 18 8. a) (1, 64), (2, 32), (4, 16), (8, 8) b) (1, 48), (2, 24), (3, 16), (4, 12), (6, 8) 9. 16, 24, 48

Performance Task – Chapter 5

1. 3 cookie boxes, 9 donut boxes, 18 muffin boxes, and 6 bagel boxes
2. a) 4 b) R2 c) Long division, $50 \div 12$

CHAPTER 6

Exercises 6.1

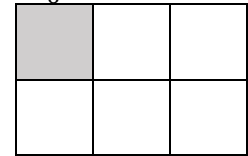
1. a) $\frac{1}{4}$ b) $\frac{3}{4}$ c) $\frac{1}{2}$ d) $\frac{1}{3}$ e) $\frac{2}{5}$ f) $\frac{1}{4}$

2.

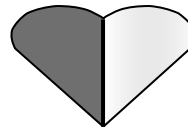
a) $\frac{1}{4}$



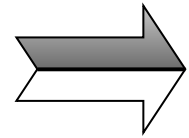
b) $\frac{1}{6}$



c) $\frac{1}{2}$



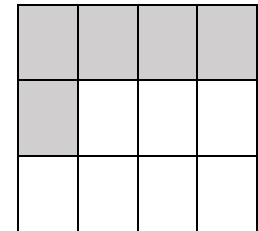
d) $\frac{1}{2}$



e) $\frac{2}{5}$



f) $\frac{5}{12}$



3. $\frac{3}{3}, \frac{7}{7}, \frac{9}{9}$ 4. a) $\frac{1}{8} + \frac{1}{8} + \frac{1}{8} = \frac{3}{8}$
b) $\frac{1}{9} + \frac{1}{9} + \frac{1}{9} + \frac{1}{9} + \frac{1}{9} = \frac{5}{9}$
c) $\frac{1}{3} + \frac{1}{3} + \frac{1}{3} + \frac{1}{3} + \frac{1}{3} + \frac{1}{3} + \frac{1}{3} = \frac{7}{3}$
d) $\frac{1}{6} + \frac{1}{6} = \frac{2}{6}$ e) $\frac{1}{11} + \frac{1}{11} + \frac{1}{11} + \frac{1}{11} = \frac{4}{11}$
f) $\frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} = \frac{8}{12}$ 5. C, it is equally divided.

Exercises 6.2

1. $\frac{6}{2}, \frac{8}{5}, \frac{12}{7}$ 2. a) 4 wholes, 3 parts
b) 7 wholes, 2 parts c) 54 wholes, 2 parts
d) 13 wholes, 6 parts e) 2 wholes, 4 parts
f) 12 wholes, 1 part
3. a) $\frac{31}{8}$ b) $\frac{22}{5}$ c) $\frac{20}{11}$ d) $\frac{46}{7}$ e) $\frac{51}{9}$ f) $\frac{23}{10}$
4. a) $2\frac{1}{5}$ b) $3\frac{5}{6}$ c) $7\frac{1}{2}$ d) $5\frac{2}{3}$ e) $3\frac{1}{4}$

Answers

f) $2\frac{1}{7}$ g) $1\frac{1}{9}$ h) $2\frac{3}{8}$

Exercises 6.3

1. a) $\frac{3}{8} + \frac{1}{8}$ b) $\frac{1}{7} + \frac{5}{7}$ c) $\frac{1}{5} + \frac{2}{5}$
 d) $\frac{2}{2} + \frac{2}{2} + \frac{1}{2}$ 2. Answers will vary.

3. Answers will vary.

4. a) $\frac{5}{5} + \frac{3}{5}$ b) $\frac{7}{7} + \frac{7}{7} + \frac{7}{7} + \frac{7}{7} + \frac{7}{7} + \frac{2}{7}$

c) $\frac{5}{5} + \frac{5}{5} + \frac{2}{5}$ d) $\frac{4}{4} + \frac{4}{4} + \frac{4}{4} + \frac{1}{4}$

e) $\frac{7}{7} + \frac{7}{7} + \frac{7}{7}$ f) $\frac{9}{9} + \frac{4}{9}$

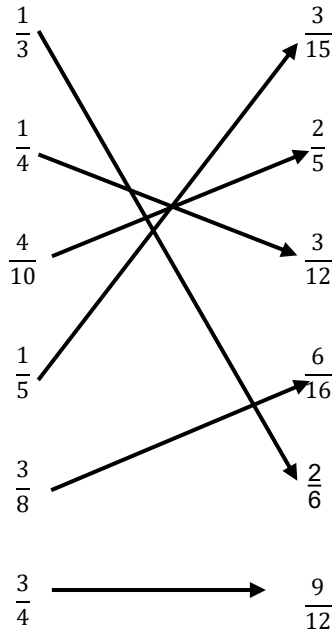
Exercises 6.4

1. a) 10 b) 8 c) $\frac{8}{10}$ 2. a) $\frac{3}{6}$ b) $\frac{6}{9}$ c) $\frac{6}{10}$
 3. a) 3 b) 2 c) 2 d) 3 e) 2 f) 2 4. a) 6
 b) 9 c) 18 d) 12 e) 50 f) 25 g) 1 h) 3

5. Answers may vary. a) $\frac{4}{22}$ b) $\frac{6}{4}$ c) $\frac{6}{12}$

d) $\frac{4}{6}$ e) $\frac{2}{10}$ f) $\frac{6}{12}$

6.



Exercises 6.5

1. a) < b) > c) < d) > e) < f) > g) >

h) < 2. a) $\frac{8}{4}$ b) $\frac{4}{6}$ c) $\frac{8}{9}$ d) $\frac{6}{7}$ e) $\frac{5}{11}$ f) $\frac{3}{12}$

g) $\frac{4}{2}$ h) $1\frac{5}{8}$ 3. a) $\frac{6}{7}$ b) $\frac{5}{2}$ c) $\frac{7}{5}$ d) $\frac{2}{9}$ e) $\frac{3}{8}$

f) $\frac{1}{5}$

Exercises 6.6

1. a) < b) < c) > d) > e) > f) = 2. a) $\frac{3}{5}$

b) $\frac{1}{2}$ c) $\frac{2}{9}$ d) $\frac{7}{10}$ e) $\frac{4}{6}$ f) $\frac{3}{4}$ 3. a) $\frac{1}{4}$ b) $\frac{2}{3}$

c) $\frac{9}{8}$ d) $\frac{2}{3}$ e) $\frac{7}{10}$ f) $\frac{9}{6}$ 4. Spencer

Exercises 6.7

1. a) $\frac{4}{6}$ b) $\frac{1}{9}, \frac{5}{9}, \frac{8}{9}$ c) $\frac{1}{3}, 1$ d) $\frac{2}{4}$

e) $\frac{3}{12}, \frac{5}{12}, \frac{8}{12}, \frac{10}{12}$

Exercises 6.8

1. a) $\frac{10}{11}$ b) 1 c) $\frac{6}{7}$ d) $\frac{7}{8}$ e) 4 f) 6 2. a) $\frac{1}{3}$

b) $\frac{6}{9}$ c) $\frac{3}{10}$ d) 1 e) $\frac{4}{8}$ or $\frac{1}{2}$ f) $2\frac{4}{5}$ 3. a) $\frac{10}{11}$

b) $1\frac{1}{5}$ c) $\frac{3}{9}$ d) $\frac{8}{12}$ or $\frac{2}{3}$ e) $\frac{6}{9}$ or $\frac{2}{3}$ f) $\frac{2}{4}$ or $\frac{1}{2}$

4. $\frac{5}{6}$ 5. $9\frac{3}{6}$ or $9\frac{1}{2}$

Exercises 6.9

1. a) 12 b) 18 c) 15 d) 4 e) 8 f) 20

2. a) $1\frac{5}{12}$ b) 2 c) $1\frac{1}{5}$ d) $2\frac{7}{8}$ e) $1\frac{1}{10}$ f) $1\frac{1}{9}$

g) $1\frac{1}{16}$ h) 1 i) $\frac{5}{8}$ j) $\frac{11}{12}$ 3. $1\frac{1}{4}$ 4. $1\frac{5}{12}$

Exercises 6.10

1. a) $1\frac{1}{5}$ b) $2\frac{1}{2}$ c) $2\frac{2}{3}$ d) $1\frac{3}{7}$ e) $5\frac{8}{11}$

f) $14\frac{2}{5}$ 2. a) $3\frac{1}{3}$ b) $2\frac{2}{3}$ c) $4\frac{4}{5}$ d) $5\frac{1}{2}$ e) $5\frac{1}{4}$

f) $2\frac{2}{5}$ 3. $1\frac{1}{2}$ 4. $\frac{5}{6}$ 5. $1\frac{1}{4}$ miles 6. $\frac{6}{8}$

Self Assessment – Chapter 6

1. C 2. $\frac{4}{4}$ 3. $\frac{9}{2}$ 4. a) $\frac{1}{7} + \frac{1}{7} + \frac{1}{7} + \frac{1}{7}$

b) $\frac{1}{5} + \frac{1}{5}$ 5. a) $4\frac{2}{3}$ b) $5\frac{3}{4}$ 6. A

7. Answers will vary. 8. B 9. No

10. Answers will vary. a) $\frac{6}{14}$ b) $\frac{4}{12}$

11. a) > b) < 12. Harena

13.



14. The denominator should remain the same.

15. $1\frac{1}{12}$ teaspoons

16. $\frac{2}{3}$ of the season

17. Yes, he is correct $\frac{3}{12} \times 4 = 1$

Performance Task – Chapter 6

- 3 cups of flour
- 2 cups of sugar
- $\frac{1}{2}$ cup unsweetened cocoa powder
- 1 teaspoon salt
- 2 teaspoons baking soda
- 2 teaspoons vanilla extract
- 2 teaspoons white vinegar
- $\frac{2}{3}$ cup vegetable oil
- 2 cups water

CHAPTER 7

Exercises 7.1

1. a) True b) False c) False d) True
2. A, C, E, F, G, H
3. a) 48 b) 56 c) 98 d) 27 e) 27 f) 5
4. a) 72 b) 42 c) 108 d) 2 e) 5 f) 3
5. a) 20 b) 16 c) 17 d) 16 e) 21 f) 28
6. a) 30 b) 16 c) 90 d) 7 7. B, E
8. Answers will vary.

Exercises 7.2

1. a) 2 b) 8 c) 11 d) 26 2. a) 12 b) 22 c) 26 d) 33 3. a) 9 b) 6 c) 9 d) 3
4. a) 175 b) 252 c) 90 d) 441 5. a) 19 b) 18 c) 384 d) 10 7. $3 \times x = 15; x = 5$; The number is 5. 8. $x \div 6 = 60; x = 360$; The number is 60. 9. $12 \div 3 = x; x = 4$; Javier can purchase 4 bags of chips.
10. $2 \times x = 6; x = 3$; Omar had \$3 to start.
11. $x \times 4 = 8; x = 2$; The canal is 2 miles long.

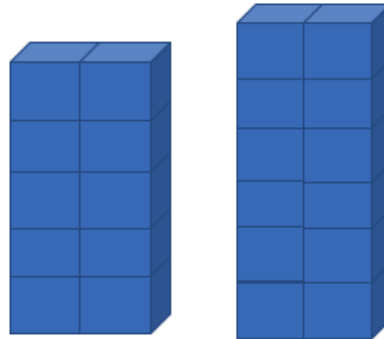
Exercises 7.3

1. a) $x + 7 = 16, x = 9$ b) $3x = 9; x = 3$
- c) $4x = 28; x = 7$ 2. a) 15 b) 10 c) 16 d) 18 e) 6 f) 10 g) 8 h) 2 3. a) 10 b) 6 c) 4 d) 2 e) 5 f) 6 g) 9 h) 6

Exercises 7.4

1. a) 25 b) 55 c) 1 d) 34 e) 162 f) 21

2. a) $n + 1$ b) $n + 11$ c) $n - 3$ d) $n - 4$
- e) $n \times 3$ f) $n + 4$ 3. a) 6 dots, 7 dots b)



- 4) 100 triangles 5) 25 squares, Anne is correct.

Exercises 7.5

1. 20 ft 2. a) $P = 14$ in b) $P = 16$ m
- c) $P = 42$ yds 3. 32 in 4. b) 38 yds

Exercises 7.6

1. a) 9 in b) 5 ft c) 9 yds d) 13 cm
2. 8 yds 3. 5 m 4. Answers will vary.

Exercises 7.7

1. a) 12 b) 12 c) 4 2. 40 square yards
3. a) 60 cm^2 b) 27 in^2 4. a) 32 ft^2
- b) 36 yds^2 c) 21 cm^2 d) 55 in^2
- e) 108 mm^2 f) 120 yds^2

Exercises 7.8

1. b) incorrect c) 8 cm 2. b) 24 cm
- c) 6 cm 3. a) 6 in b) 24 in c) Answers will vary.

Self Assessment – Chapter 7

1. a) T b) F c) F d) T
2. Octavio is correct. 3. a) D b) B c) A d) C 4. 43 5. a) 14 b) 10 c) 8 d) 6 e) 6 f) 2 6. a) 26 in b) 40 in^2
7. a) 18 b) 5 c) 12 d) 9 8. 10 feet
9. a) 40 in b) 96 in^2 10. a) 24 in b) Answers will vary. c) Answers will vary.

Performance Task – Chapter 7

1.

Animal	Number Last Year	Change from Last Year	Number this Year
Pigs	7	Decreased by 2	5
Chickens	44	Increased by 8	52
Llamas	3	Remained same	3
Ducks	17	Increased by 5	22
Geese	15	Increased by 11	26
Rabbits	12	Decreased by 3	9

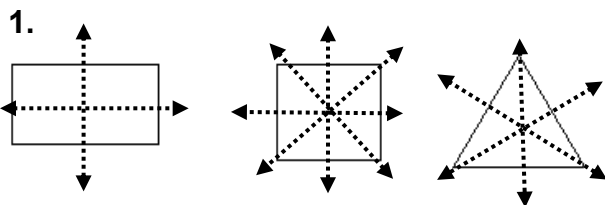
2. Pigs: $7 - 2 = x$
 Chickens: $44 + 8 = x$
 Llamas: $3 + x = 3$
 Ducks: $17 + x = 22$
 Geese: $x + 11 = 26$
 Rabbits: $x - 3 = 9$
3. Pigs: $7 - 2 = 5$
 Chickens: $44 + 8 = 52$
 Llamas: $3 + 0 = 3$
 Ducks: $17 + 5 = 22$
 Geese: $15 + 11 = 26$
 Rabbits: $12 - 3 = 9$

CHAPTER 8

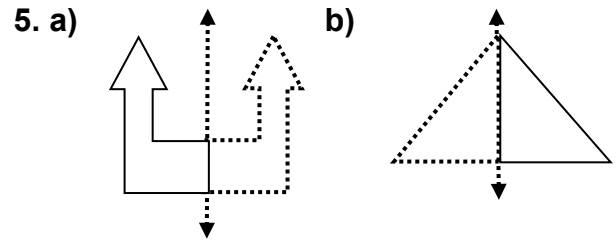
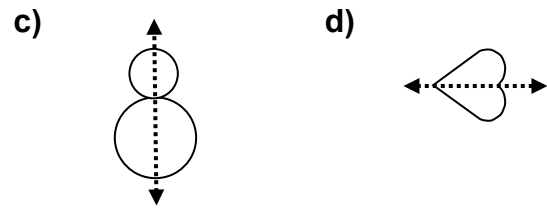
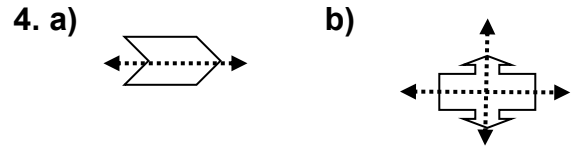
Exercises 8.1

1. a) neither b) horizontal c) vertical
 d) neither 2. A & D 3. B & C
 4. a) CD and DE, DE and EB, EB and BC,
 BC and CD b) None

Exercises 8.2

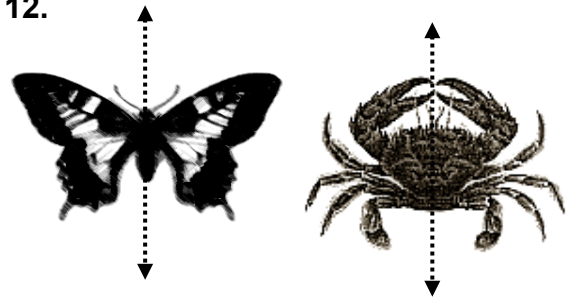


2. a) 4 b) 2 c) 3
 3. B, C, H



6-10. Answers will vary. 11. No

12.



13. Answers will vary.

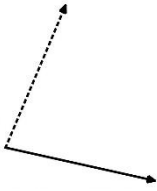
Exercises 8.3

1. a) acute b) right c) obtuse d) straight
 2. a) acute b) obtuse

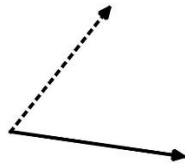
Exercises 8.4

1. a) About 30° b) About 70° c) About 90°
 d) About 50° e) About 35° f) About 55°
2. a)
- b)

c)



d)



3. a) About 120° b) About 150° Both are greater than 90° . 4. $A = 90^\circ$; $B = 40^\circ$; $C = 50^\circ$; Angle A is equal to the sum of angle B and angle C.

Exercises 8.5

1. a) About 90° b) About 25°
 c) About 120° d) About 11.5° 2. a) 60°
 b) 140° c) 120° d) 180°
 3-4. Answers may vary.

Exercises 8.6

1. a) 50° b) 20° 2. a) 70° b) 60°
 3. a) 55° b) 30° c) 45° d) 37°
 4. a) 65° b) 23° c) 83° d) 36° e) 3°
 f) 77.5° g) 34.6° h) 23.5° i) 89.3°
 5. a) 130° b) 55° c) 172° d) 5° e) 78°
 f) 54.8° g) 19.7° h) 59.5° i) 162.4°

Exercises 8.7

1. Alike: each has four sides; each has four angles; opposite sides are parallel; sides are straight. Different: The rectangle has four 90° angles, but the parallelogram has angles that are less than 90°
 2. Alike: each has four sides; each has four angles; opposite sides are parallel; sides are straight. Different: all sides in the rhombus are the same length, but not in the parallelogram.
 3. Alike: each has four sides; each has four angles; the top and bottom sides are parallel; sides are straight. Different: The parallelogram has two sets of parallel sides, but the trapezoid only has one.
 4. Alike: each has four sides; each has four angles; opposite sides are parallel; sides are straight. Different: The rectangle has four 90° angles, but the rhombus has

angles that are less than 90° ; The rhombus has four sides of equal length, but the rectangle doesn't. The opposite sides of the rectangle are the same length.

5. Alike: each has four sides; each has four angles; sides are straight. Different: The rhombus has four sides of equal length, but the trapezoid does not. The rhombus has two pairs of parallel sides, but the trapezoid only has one pair of parallel sides.

6. Alike: each has four sides; each has four angles; sides are straight. Different: The rectangle has four 90° angles, but the trapezoid does not. The rectangle has two pairs of parallel sides, but the trapezoid only has one pair of parallel sides. In the rectangle, opposite sides are the same length, but not in the trapezoid.

7. Answers will vary.

Exercises 8.8

1. a) isosceles b) scalene c) equilateral
 d) isosceles e) scalene f) isosceles
 2. a) scalene b) isosceles c) equilateral
 d) scalene 3. a) equiangular b) obtuse
 c) right d) equiangular e) acute
 f) obtuse 4. a) acute b) obtuse
 c) equiangular d) right

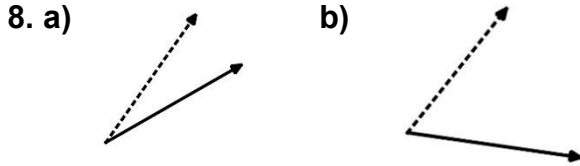
Exercises 8.9

1. a) pentagon b) quadrilateral
 c) triangle d) hexagon 2. a) irregular
 polygon b) irregular polygon c) regular
 polygon d) irregular polygon
 3. a) square b) parallelogram
 c) trapezoid d) rectangle 4. a) irregular
 polygon b) irregular polygon c) regular
 polygon d) irregular polygon 5. 12.5 cm
 6. 19.5 cm 7. 7.5 cm

Self Assessment – Chapter 8

1. a) ray b) line 2. Answers will vary.
 3. 20° 4. 110° 5. a) equilateral
 b) scalene 6. a) regular b) irregular
 7. a) about 70° b) about 15°

Answers



Performance Task – Chapter 8
Answers will vary.

CHAPTER 9

Exercises 9.1

1. 3 inches, 7.6 cm 2. 2 in, 3 in 3. 4.5 cm, 3 cm 4. 8.5×11 5. inches 6. a) Metric
b) US Customary c) US Customary
d) Metric 7. a) feet b) inches
8. a) centimeters b) meters 9. a) F b) T
c) T 10. c) Yes

Exercises 9.2

1. a) 144 inches b) 6 feet c) 1.5 feet
2. a) 8 meters b) 40,000 cm c) 0.5 m
3. a) 126 feet b) 17 yards 4. 4 feet
5. 2 yards 6. 3,000 m 7. 91 in 8. 86 in
9. 330 yds 10. 4,194 cm 11. 2.2 km
12. 27 inches

Exercises 9.3

1. 96 oz 2. 12,000 g 3. 6000 lbs
4. 2.5 kg 5. 2 oz 6. 625 g

Exercises 9.4

1. 8000 ml 2. a) 7.5 pints b) 48 qts
c) 7.5 qts d) 16.5 gals e) 8000 ml f) 2.5 l
g) 8.75 pints h) 90 qts 3. 0.5 qt
4. 3 containers 5. No

Exercises 9.5

1. 48 h 2. 4 min 3. 140 min 4. 345 sec
5. 207 h 6. 845 sec 7. 957 sec
8. 132 min 9. 880 sec 10. 8 sec
11. 17 sec

Exercises 9.6

1. 5 ft 2. 39 in 3. 12.5 4. 4 km
5. a) 4,575 ml b) About \$13

Self Assessment – Chapter 9

1. a) 48 in b) 3 ft c) 54 in d) 1,500 m
2. a) 120 mins b) 2 h
3. Corrected chart:

Number of Hours	Number of Minutes
1	60
2	120
3	180
4	240
5	300

4. Should be 17,250 ml 5. 10 km 6. a) No
b) Yes 7. True

Performance Task – Chapter 9

1. a) about 112.5 miles b) about 450 miles
2. Answers will vary.

CHAPTER 10

Exercises 10.1

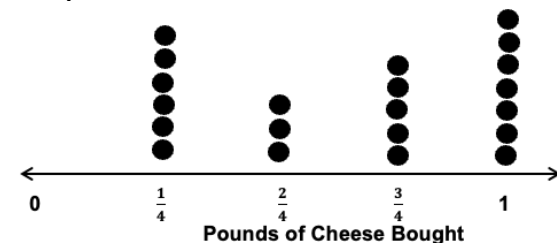
1. Circle A, D, E, G, Rectangle B, C, F
2. a) Questionnaire b) Questionnaire
c) Interview d) Questionnaire
3. Answers will vary.

Exercises 10.2

1.

Score	Frequency
15	4
18	1
20	1
21	2
22	4
28	1
29	3
31	1

2. 18 3. 16 points 4. 15 and 22 5. 5
6. a)



- b) 3.75 lbs c) 13.75 lbs

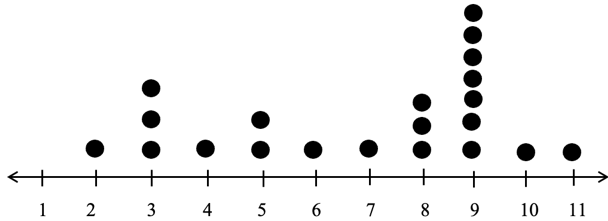
Exercises 10.3

1. a)

Tens Digits	Ones Digit
2	5 6 6 6 6 6 6 7 7 7 7 7 7 7 7
3	8 8 8 8 8 8 8 8 8 8 9 9 9
	0 0

b) 25 c) 30 d) 5 years e) 24 f) $\frac{3}{4}$

2. a)



b) 2 c) 11 d) $\frac{9}{21}$ e) Answers will vary.

3. Survey 4-5. Answers may vary.

Exercises 10.4

1. a) M = 9, E = 8, O = 6 b) M = 12, E = 11, O = 7 2. a) Mean = 26.3, Median = 24, Mode = 32 b) Mean = 28.9, Median = 30, Mode = 40
 3. a) Mean = 377,833.33, Median = 299,000, Mode = 315,000
 b) Range = 700,000 c) Answers will vary.
 4. a) Mean = \$0.91, Median = 0.885, Mode = \$0.88 b) Range = \$0.35
 c) Answers will vary. 5. a) A b) The data isn't numeric. 6. Answers will vary.
 7. a) 29 b) 8 c) 13

Exercises 10.5

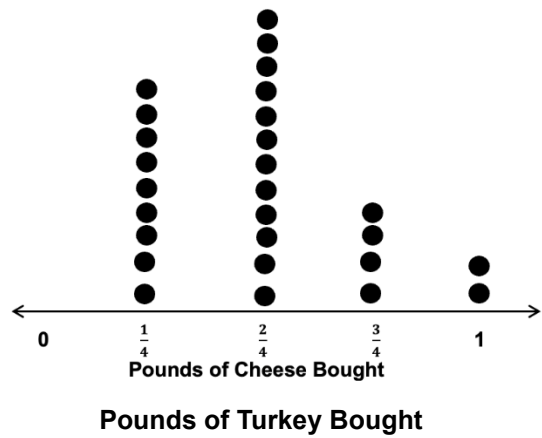
1. a) 123, 125, 127, 128, 128, 130, 130, 130, 130, 136, 139, 141 b) 130 c) $\frac{5}{12}$
 d) Answers will vary. 2. a) 116, 123, 124, 128, 132, 132, 132, 144, 145, 147, 150, 159 b) Mean = 136, Median = 132, Mode = 132. He can be on the team.
 3. a) \$12 per hour b) Mean = 16.86, Median = 16, Mode = 12 c) Mode

Self Assessment – Chapter 10

1.

Number of Tickets Sold	Tally	Frequency
4	1	1
5	6	6
6	2	2
7	3	3
10	2	2
12	2	2

2. a) 22 b) 57 c) 43 d) 7
 3. Mean = 11.6, Median = 11, Mode = 12
 4. 5.3 5. a) Mean = 79.6, Median = 78.5, Mode = 96 b) 35 c) Mean
 6. a)



b) 3 lbs. c) 13.25 lbs.

Performance Task – Chapter 10

1-3. Answers will vary.