

Page 4

1. 5,000 2. 500,000 3. 50 4. 50,000

Page 6

1. 49 2. 27 3. 1,000,000
4. 6 5. 376,996 6. 50,625

Page 7

1. $\frac{1}{25}$ 2. $\frac{1}{1,000}$ 3. 1
4. $\frac{1}{4}$ 5. 32 6. 1

Page 8

1. 16 2. 27
3. 7 4. 8,000,000
5. 760,000 6. 5×10^2
7. 4.4×10^4 8. 6×10^8

Page 9

1. false 2. false 3. true 4. true

Page 10

1. 1, 3, 5, 15 2. 1, 2, 4, 8
3. 1, 2, 4, 7, 14, 28
4. 1, 2, 3, 4, 6, 9, 12, 18, 36
5. 1, 11
6. 1, 2, 4, 5, 10, 20, 25, 50, 100

Page 11

1. by 3 and by 5 2. by 2, 3, 5, 6, and 10
3. by 2 4. by 3 and 9
5. by 2, 3, 5, 6, 9, and 10

Page 12

1. 3×5 2. $2 \times 2 \times 5$, or $2^2 \times 5$
3. $2 \times 2 \times 2 \times 5$, or $2^3 \times 5$
4. $2 \times 2 \times 3 \times 3$, or $2^2 \times 3^2$
5. $2 \times 2 \times 2 \times 2 \times 2$, or 2^5
6. $2 \times 2 \times 5 \times 5$, or $2^2 \times 5^2$

Page 14

1. 887 2. 133 3. 321
4. 1,023 5. 863 6. 830

Page 15

1. 38 2. 382 3. 366
4. 262 5. 4,279

Page 16

1. 363 2. 159 3. 216 4. 243

Page 17

1. 456 2. 517 3. 283 4. 2,708

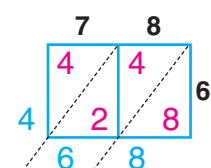
Page 18

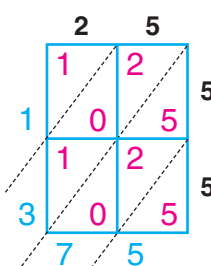
1. 900 2. 36,000 3. 2,500
4. 32,000 5. 4,000 6. 56,000

Page 19

1. $3 \times 200 = 600$
 $3 \times 60 = 180$
 $3 \times 5 = 15$
 $3 \times 265 = 795$
2. $40 \times 60 = 2,400$
 $40 \times 7 = 280$
 $2 \times 60 = 120$
 $2 \times 7 = 14$
 $42 \times 67 = 2,814$
3. $40 \times 50 = 2,000$
 $40 \times 8 = 320$
 $0 \times 50 = 0$
 $0 \times 8 = 0$
 $40 \times 58 = 2,320$
4. $80 \times 50 = 4,000$
 $80 \times 4 = 320$
 $3 \times 50 = 150$
 $3 \times 4 = 12$
 $83 \times 54 = 4,482$
5. $50 \times 300 = 15,000$
 $50 \times 70 = 3,500$
 $50 \times 2 = 100$
 $50 \times 372 = 18,600$

Page 20

1.  $6 \times 78 = 468$

2.  $55 \times 25 = 1,375$

3. $77 * 89 = 6,853$

4. $8 * 444 = 3,552$

5. $357 * 6 = 2,142$

Page 21

1. 45 2. 8,000 3. 6,000
4. 530 5. 70 6. 900

Page 23

1. 17 R3 2. 147 3. 85 R2 4. 224 R2

Page 27

1. 0.80 2. 0.08
3. $\frac{70}{100}$ or $\frac{7}{10}$ 4. $\frac{4,506}{1,000}$ or $4\frac{506}{1,000}$
5. $\frac{2,468}{100}$ or $24\frac{68}{100}$ 6. $\frac{14}{1,000}$

Page 30

1. a. 20,000 b. $\frac{2}{100}$ c. $\frac{2}{1,000}$
2. a. 0.359 b. 0.953 c. 0.539

Page 33

1. $0.59 > 0.059$ 2. $0.099 < 0.1$
3. $\frac{1}{4} < 0.30$ 4. $0.99 > 0.100$

Page 36

1. 16.02 2. 1.69 3. 0.023

Page 37

1. 456 2. 2,800 3. \$4,500 4. 10.4

Page 39

1. 9.69 2. 19.572 3. 2.4644 4. 0.0063

Page 40

1. $32.5 * 2.5 = 81.25$

2. $4.02 * 17 = 68.34$

3. $8.1 * 23.4 = 189.54$

Page 41

1. 5.67 2. 0.0047 3. \$0.29 4. 0.006

Page 42

1. 24.8 2. 2.11 3. 1.3

Page 43

1. 2.9 2. 3.6 3. 15.1

Page 46

1. a. 1.6 b. 36.5 c. 1.9
2. a. 1.7 b. 36.6 c. 2.0
3. a. 1.6 b. 36.6 c. 11.0

Page 50

1. \$48 2. \$4 3. \$600

Page 51

1. \$3 2. \$2.25

Page 90

Fraction	Decimal	Percent
$\frac{1}{4}$	0.25	25%
$\frac{8}{10}$ or $\frac{4}{5}$	0.80	80%
$\frac{1}{2}$	0.50	50%
$\frac{35}{100}$ or $\frac{7}{20}$	0.35	35%
$\frac{1}{10}$	0.10	10%
$\frac{5}{8}$	0.625	62.5%

Page 92

1. -2 2. -8 3. 1 4. -12

Page 94

1. -10 2. 12 3. -6 4. -10

Page 103

1. $\frac{6 \text{ dollars}}{1 \text{ hour}}$

dollars	6	12	18	24
hours	1	2	3	4

2. $\frac{8 \text{ pounds}}{1 \text{ gallon}}$

pounds	8	16	24	32
gallons	1	2	3	4

Page 104

1. 15 feet; 42 feet
2. 630 times; 1,400 times

Page 105

1. \$6 2. \$35 3. \$1.20

Page 107

1. 12 to 20, $\frac{3}{5}$, 60%, or 12:20
2. 8 to 12, $\frac{8}{12}$, 67%, or 8:12 3. 40%

Page 109

1. \$24 2. 20

Page 111

1. 20 cm 2. 1,500 miles

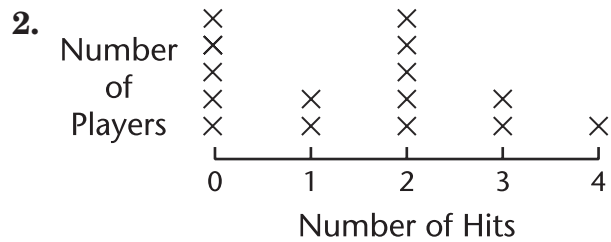
Page 112

1. 6.28 inches 2. 1.59 inches

Page 117

1.

Number of Hits	Number of Players
0	///
1	//
2	///
3	//
4	/



Page 118

1.

Number of Points	Number of Games
10-19	/
20-29	///
30-39	///
40-49	///

2.

Number of Points Scored	
Stems (10s)	Leaves (1s)
1	7
2	9 6 8 7 1
3	5 5 5
4	4 6 5

Page 119

1. 0 2. 4 3. 4 4. 2 5. 2

Page 120

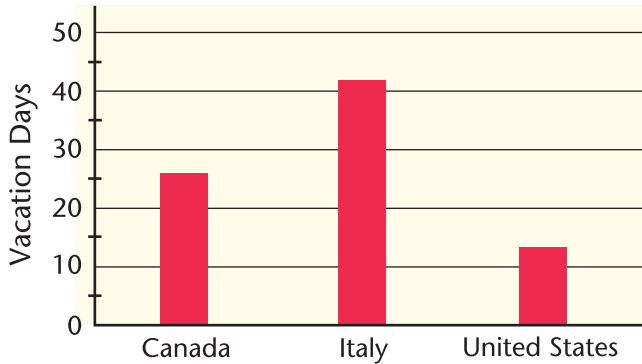
1. min. = 0; max. = 4; range = 4;
mode = 2 and 3; median: 2.5
2. 13.5

Page 121

Jason's mean (average), rounded to the nearest hundredth, is 80.91.

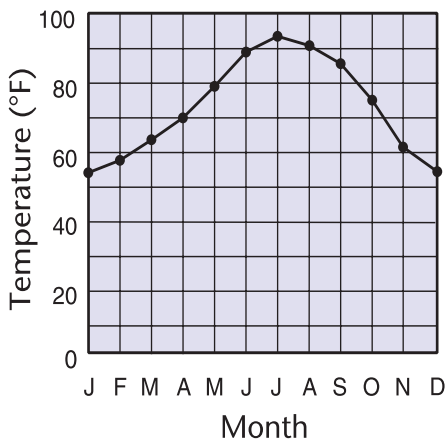
Page 122

Vacation Days per Year



Page 118

Average Temperatures for Phoenix, Arizona

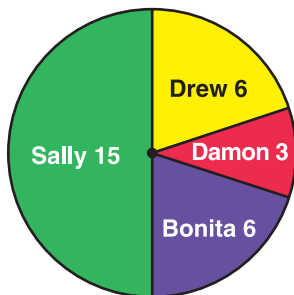


Page 125

3rd grade represents 62% - 45%, or 17%
 4th grade represents 85% - 62%, or 23%
 5th grade represents 100% - 85%, or 15%

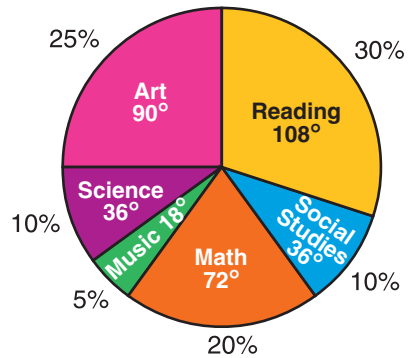
Page 126

Hot Shots Game Points



Page 127

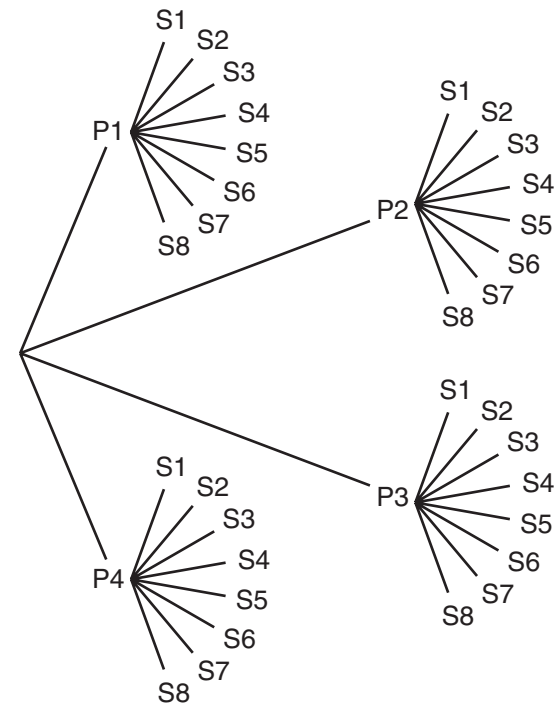
Favorite Subjects



Page 133

- $\frac{4}{13}$
- $\frac{9}{13}$
- $\frac{3}{13}$
- $\frac{6}{13}$
- $\frac{7}{13}$
- $\frac{13}{13}$, or 1

Page 134

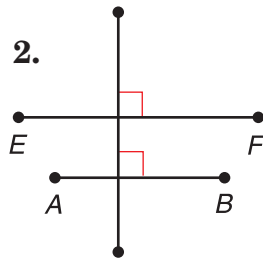


Page 139

-
- Sample answer:
- a. $\angle 2 = 50^\circ$
 b. $\angle 1 = 130^\circ$
 c. $\angle 3 = 130^\circ$

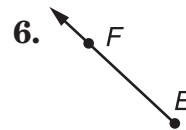
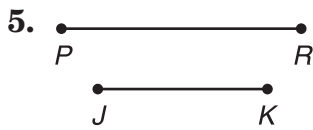
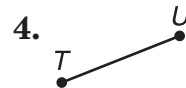
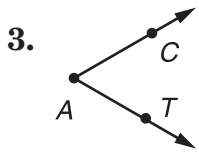
Page 140

Sample answers:



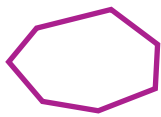
Page 141

Sample answers:



Page 143

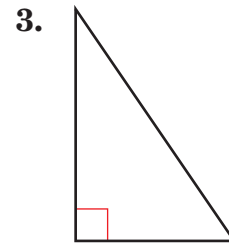
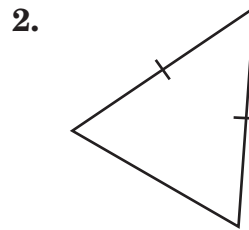
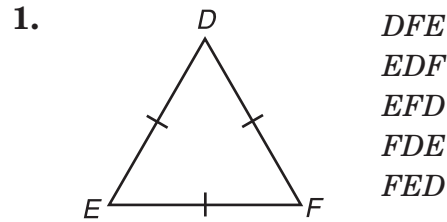
- a. hexagon
b. quadrangle or quadrilateral
c. octagon
- Sample answers:



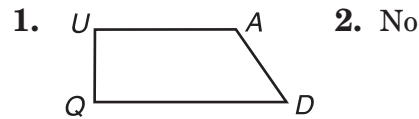
- The sides of the cover of the journal are not all the same length.

Page 144

Sample answers:



Page 145



3. *UADQ, ADQU, DQUA, QDAU, DAUQ, AUQD, UQDA*

Page 146

Sample answers:

- All sides of a square have the same length. The sides of a rectangle may or may not all have the same length.
- A rhombus is a parallelogram. A kite is not a parallelogram. All sides of a rhombus have the same length. The sides of a kite have two different lengths.
- A trapezoid has exactly one pair of parallel sides. A parallelogram has two pairs of parallel sides.

Page 148

Sample answers:

- They each have at least one circular face. They each have a curved surface.
 - A cylinder has three surfaces; a cone has two. A cylinder has 2 circular bases, 2 edges, and no vertices. A cone has 1 circular base, 1 edge, and 1 vertex.
- They each have at least one vertex. They each have a flat base.
 - A cone has a curved surface; the surfaces of a pyramid are all flat surfaces (faces). A cone has 1 circular face; the faces of a pyramid are all shaped like polygons. A cone has only one vertex. A pyramid has at least four vertices.

Page 149

- 5
 - 1
- 5
 - 2

Page 150

- 8
 - 18
 - 12
- decagonal prism

Page 151

- 4
 - 6
 - 4
- pentagonal pyramid
- Sample answers:
 - The surfaces of each are all formed by polygons. Their base shape is used to name them.
 - A prism has at least one pair of parallel faces; no two faces of a pyramid are parallel. The faces of a prism that are not bases are all parallelograms. The faces of a pyramid that are not the base are all triangles.

Page 152

- regular tetrahedron, regular octahedron, regular icosahedron
- 12
 - 6
- Sample answers:
 - Their faces are equilateral triangles that all have the same size.
 - The tetrahedrons have 4 faces, 6 edges, and 4 vertices. The octahedrons have 8 faces, 12 edges, and 6 vertices.

Page 155

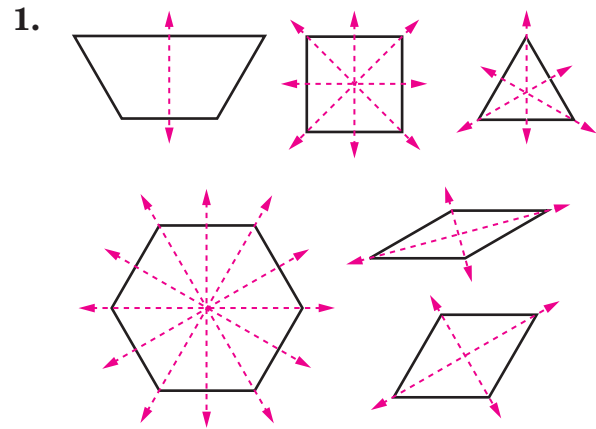
a, b, c, d, or all of these

Page 158



2. C

Page 159



2. Infinite; any line drawn directly through its center is a line of symmetry.

Page 183

- millimeter, gram, meter, centimeter
- $\frac{1}{1,000}$
- 2,000 mg

Page 186

- 27 feet 2 inches
- 39 inches

Page 187

- 24 mm
- 75.4 mm
- 44.0 in.

Page 189

- 6 square units
- 38 in.²
- 49 m²

Page 191

- 8 square units
- 15 square units
- 20 square units

Page 192

- 768 ft²
- 80 in.²
- 2.2 cm²

Page 193

1. 24 in.² 2. 27 cm² 3. 10.8 yd²

Page 194

1. 18 mm 2. 9 mm 3. 254.5 mm²

Page 197

1. 42 yd³ 2. 1,000 cm³ 3. 288 ft³

Page 199

1. 128 yd³ 2. 80 cm³ 3. 75 ft³

Page 200

340 cm²

Page 201

94.2 cm²

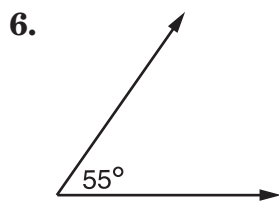
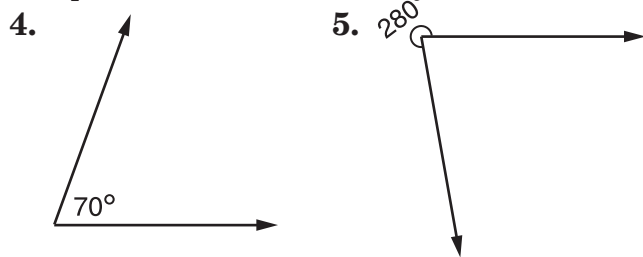
Page 202

1. about 180 grams; 170.1 grams
2. 937 ounces

Page 206

1. 45° 2. 210° 3. 75°

Sample answers:

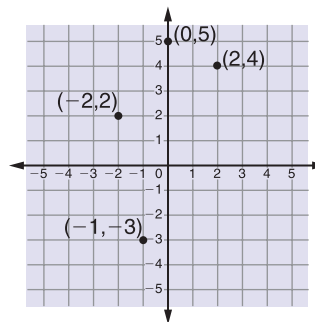


Page 207

1. a. 2 b. 3 c. 6 d. 10
2. 540° 3. 135°
4. number of triangles = number of sides - 2

Page 208

1-4



Page 217

1. $\frac{1}{2}x = 28$ or $\frac{x}{2} = 28$
2. $n = 15 * 4$
3. $c = \pi * d = 3.14 * 2 \text{ cm} = 6.28 \text{ cm}$
4. $c = \pi * d = 3.14 * 3 \text{ in.} = 9.42 \text{ in.}$

Page 218

1. Barbara's height = $A - 3$
2. miles run = $2 * D$
3. 6 4. 16 5. 2 6. 18

Page 219

1. $y = 16$ 2. $z = 6$ 3. $m = 11$

Page 220

1. true 2. false 3. true
4. true 5. false 6. true

Page 221

1. false 2. true 3. false
4. < 5. = 6. >

Page 222

1. $x = 45$ 2. $y = 600$
3. $w = 35$ 4. $n = 56$
5. $25 - (15 + 10) = 0$
6. $100 = 10 * (9 + 1)$
7. $5 = 3 + (6 * 3) / (3 * 3)$
8. $26 = (7 + 6) * 2$

Page 223

1. 13 2. 25 3. 1

Page 225

1. $8 * (15 + 6) = (8 * 15) + (8 * 6)$
2. $(5 * 41) + (5 * 11) = 5 * (41 + 11)$
3. $16 * (10 - 8) = (16 * 10) - (16 * 8)$

Page 227

- $\$12.95 - \$9.50 = x; x = \$3.45$
- $26 * \$4.50 = n; n = \117

Page 229

- One cube weighs the same as 2 marbles.
- One cube weighs the same as 3 marbles.

Page 232

1. in	out	2. in	out
v	$2 * v + 1$	x	$5x$
0	1	5	25
1	3	9	45
2	5	20	100

3.

Rule

$\div 2$

Page 234

- $\$10.00$
- 360 miles

Page 243

- The 15-ounce box is a better buy. It costs \$0.24 per ounce; the 10-ounce box costs \$0.25 per ounce.
- 150 miles
 - 25 miles
 - 125 miles
 - 600 miles

Page 245

- 100 squares (Think: $1 + 3 + 5 + 7 + 9 + 11 + 13 + 15 + 17 + 19$)
- 2,500 squares (Notice the pattern:
 5 steps tall = $5^2 = 25$ squares;
 10 steps tall = $10^2 = 100$ squares;
 50 steps tall = $50^2 = 2,500$ squares)

Page 248

- Emily is not correct. The leading-digit estimate is $800 + 200 + 700 = 1,700$. She should check her work.
- Luis is not correct. The leading-digit estimate is $900 / 30 = 30$. He should check his work.

Page 249

- 25,800
- 30,000
- 25,800

Page 250

- Sample estimate: $500 * 30 = 15,000$; ten thousands
- Sample estimate: $60,000/100 = 600$; hundreds
- Sample estimate: $3,000/1 = 3,000$; thousands

Page 256

- 82
- 4
- 60.5
- 28

Page 258

- 14 R4
- 17 R0
- 757 R25

Page 267

- 0.3125
- $\frac{77}{200}$, or $\frac{385}{1,000}$
- 0.9%
- 4.58
- 21.875%
- $\frac{29}{50}$, or $\frac{58}{100}$

Page 269

- 0.8
- 235
- 1258.378
- 1.00

Page 274

- 0.00058
- 76,000,000
- 0.000004389, or 0.0000043
- 0.000011

Page 275

- $6.0846 * 10^{15}$, or $6.085 * 10^{15}$
- $5.3798 * 10^{11}$, or $5.38 * 10^{11}$
- $1.5365 * 10^{16}$, or $1.537 * 10^{16}$
- $2.7775 * 10^{17}$, or $2.778 * 10^{17}$
- exactly $3.118752 * 10^8 = 311,875,200$ hands, or about $3.1187 * 10^8 = 311,870,000$ hands

Page 277

- 25,447 ft²
- 83.9 cm



Page 280

about 620 ft²

Page 281

1. \$11.25; \$86.25

Page 284

1. \$63.50

2. \$29.50

Page 286

1. 11, 18, 25, 32, 39, 46

2. 120, 107, 94, 81, 68, 55