

Lesson 4

Problem Set

- 5; 2; 2; 20
 - 3; 2; 4; 24
 - 4; 2; 4; 32
 - 4; 3; 3; 36
- $5 \text{ cm} \times 2 \text{ cm} \times 2 \text{ cm} = 20 \text{ cm}^3$ (or variant)
 - $3 \text{ cm} \times 2 \text{ cm} \times 4 \text{ cm} = 24 \text{ cm}^3$ (or variant)
 - $4 \text{ cm} \times 2 \text{ cm} \times 4 \text{ cm} = 32 \text{ cm}^3$ (or variant)
 - $4 \text{ cm} \times 3 \text{ cm} \times 3 \text{ cm} = 36 \text{ cm}^3$ (or variant)
- $4 \text{ in} \times 3 \text{ in} \times 4 \text{ in} = 48 \text{ in}^3$
 - $3 \text{ m} \times 2 \text{ m} \times 6 \text{ m} = 36 \text{ m}^3$
- 560 cm^3
- Explanations will vary.
 - 300 cm^3
 - 240 in^3

Exit Ticket

- 2; 2; 4; 16; $2 \text{ mm} \times 2 \text{ mm} \times 4 \text{ mm} = 16 \text{ mm}^3$ (or variant)
- 100 ft^3

Homework

- 5; 2; 4; 40
 - 3; 2; 5; 30
 - 4; 2; 4; 32
 - 8; 3; 3; 72
- $5 \text{ cm} \times 2 \text{ cm} \times 4 \text{ cm} = 40 \text{ cm}^3$ (or variant)
 - $3 \text{ cm} \times 2 \text{ cm} \times 5 \text{ cm} = 30 \text{ cm}^3$ (or variant)
 - $4 \text{ cm} \times 2 \text{ cm} \times 4 \text{ cm} = 32 \text{ cm}^3$ (or variant)
 - $8 \text{ cm} \times 3 \text{ cm} \times 3 \text{ cm} = 72 \text{ cm}^3$ (or variant)
- $8 \text{ in} \times 4 \text{ in} \times 8 \text{ in} = 256 \text{ in}^3$
 - $10 \text{ m} \times 3 \text{ m} \times 7 \text{ m} = 210 \text{ m}^3$
- 20,160 in^3
- 224 m^3
 - 2,366 in^3

Lesson 5

Problem Set

- Answers will vary.
- Answers will vary.
- Answers will vary.
- $1 \text{ cm}^3 = 1 \text{ mL}$, explanations will vary.
- No, the beaker holds 40 mL less than the cube.
- 7,800 mL
 - 7.8 L
 - 1,560 mL; explanations will vary.
- 2 cm

Exit Ticket

- 225 cm^3
- Beaker shaded to line between 200 mL and 250 mL

Homework

- Beaker shaded to line between 20 mL and 40 mL; explanations will vary.
- A; C; explanations will vary.
- Answers will vary.

Lesson 6

Problem Set

- 420 cm^3 ; strategies will vary.
 - 444 in^3 ; strategies will vary.
 - 108 cm^3 ; strategies will vary.
 - 324 m^3 ; strategies will vary.
- $3,840 \text{ in}^3$
- 4 cm
- 120 cm^3 or 120 mL
- A: 144 ft^3 ; B: 288 ft^3
 - 6 ft
 - 18 ft

Exit Ticket

303 in^3

Homework

- 72 in^3 ; strategies will vary.
 - $1,431 \text{ cm}^3$; strategies will vary.
 - 249 mm^3 ; strategies will vary.
 - 472 m^3 ; strategies will vary.
- $1,254 \text{ in}^3$
- 5 cm
- 585 cm^3 or 585 mL
- A: 74 ft^3 ; B and C: 222 ft^3

Lesson 7

Sprint

Side A

1.	$\frac{1}{4}$	12.	$\frac{4}{15}$	23.	$\frac{10}{15}$	34.	$\frac{15}{20}$
2.	$\frac{1}{6}$	13.	$\frac{1}{12}$	24.	$\frac{15}{10}$	35.	$\frac{18}{20}$
3.	$\frac{1}{8}$	14.	$\frac{2}{12}$	25.	$\frac{1}{9}$	36.	$\frac{6}{20}$
4.	$\frac{1}{14}$	15.	$\frac{6}{12}$	26.	$\frac{2}{9}$	37.	$\frac{1}{49}$
5.	$\frac{1}{14}$	16.	$\frac{1}{18}$	27.	$\frac{4}{9}$	38.	$\frac{3}{40}$
6.	$\frac{1}{6}$	17.	$\frac{5}{18}$	28.	$\frac{6}{6}$	39.	$\frac{5}{24}$
7.	$\frac{1}{9}$	18.	$\frac{10}{18}$	29.	$\frac{8}{9}$	40.	$\frac{9}{16}$
8.	$\frac{1}{18}$	19.	$\frac{10}{12}$	30.	$\frac{10}{9}$	41.	$\frac{12}{18}$
9.	$\frac{1}{15}$	20.	$\frac{1}{25}$	31.	$\frac{9}{10}$	42.	$\frac{18}{8}$
10.	$\frac{1}{15}$	21.	$\frac{4}{25}$	32.	$\frac{3}{20}$	43.	$\frac{49}{72}$
11.	$\frac{2}{15}$	22.	$\frac{6}{25}$	33.	$\frac{12}{20}$	44.	$\frac{63}{96}$

Homework

1. 216 in^3 ; diagrams will vary.
2. Three different diagrams drawn
3. Answers will vary.
4.
 - a. No; explanations will vary.
 - b. Answers will vary.
 - c. Answers will vary.
 - d. Answers and explanations will vary.

Lesson 8

Problem Set

Parameters will vary.

Exit Ticket

Prism sketches and dimensions will vary.

Homework

1. $1,080 \text{ cm}^3$; answers will vary.
2. Answers will vary.

Lesson 9

Problem Set

Measurements and calculations will vary.

Exit Ticket

- a. 12; 6; 4; 288
- b. 18; 10; 10; 1,800
- c. 2,088

Homework

Answers will vary.

Lesson 10

Problem Set

1. Rectangle 3 units by 2 units drawn with tiles; 3; 2; 6
2. Rectangle 3 units by $2\frac{1}{2}$ units drawn with tiles; 3; $2\frac{1}{2}$; $7\frac{1}{2}$
3. Rectangle $1\frac{1}{2}$ units by 5 units drawn with tiles; 5; $1\frac{1}{2}$; $7\frac{1}{2}$
4. Rectangle 2 units by $1\frac{3}{4}$ units drawn with tiles; 2; $1\frac{3}{4}$; $3\frac{1}{2}$
5. Rectangles $\frac{3}{4}$ unit by 5 units drawn with tiles; 5; $\frac{3}{4}$; $3\frac{3}{4}$
6. $60\frac{3}{4}\text{ in}^2$; explanations will vary.
7. 69 ft^2

Exit Ticket

$$2\frac{1}{2}; 2; 5$$

Homework

1. a. $7\frac{1}{2}$
b. 4; $2\frac{1}{4}$; 9
c. Rectangle $\frac{3}{4}$ units by 4 units is drawn and tiled; 3
d. Rectangle 2 units by $1\frac{3}{4}$ units is drawn and tiled; $3\frac{1}{2}$
2. $109\frac{1}{2}\text{ in}^2$
3. $42\frac{3}{4}\text{ ft}^2$

Problem Set

- $4\frac{1}{2}$, $2\frac{1}{2}$, $11\frac{1}{4}$
- $3\frac{3}{4}$, $1\frac{3}{4}$, $6\frac{9}{16}$
- $1\frac{1}{2}$, $\frac{3}{4}$, $1\frac{1}{8}$
- $\frac{3}{4}$, $\frac{1}{2}$, $\frac{3}{8}$
- Rectangles drawn
 - Colleen's: $41\frac{2}{3}$ cm²; Caroline's: $166\frac{2}{3}$ cm²
 - Answers will vary.
- $162\frac{9}{16}$ in²

Exit Ticket

Rectangle $2\frac{1}{2}$ square units sketched; $6\frac{1}{4}$ square units

Homework

- $2\frac{3}{4}$, $1\frac{1}{2}$, $4\frac{1}{8}$
 - Rectangle $2\frac{1}{2}$ by $\frac{3}{4}$ units drawn and tiled; $1\frac{7}{8}$
 - Rectangle $3\frac{1}{3}$ by $2\frac{1}{2}$ units drawn and tiled; $8\frac{1}{3}$
 - Rectangle $3\frac{1}{2}$ by $2\frac{1}{4}$ units drawn and tiled; $7\frac{7}{8}$
- $39\frac{1}{16}$ in²

Lesson 12

Problem Set

- Rectangle labeled; 5 in^2
 - Rectangle labeled; $3 \frac{1}{16} \text{ in}^2$
 - Rectangle labeled; $5 \frac{1}{2} \text{ in}^2$
 - Rectangle labeled; $7 \frac{5}{16} \text{ in}^2$
 - Rectangle labeled; $1 \frac{7}{8} \text{ in}^2$
 - Rectangle labeled; $1 \frac{7}{8} \text{ in}^2$
- $1 \frac{1}{2} \text{ ft}^2$, explanations will vary.
 - $2 \frac{1}{4} \text{ yd}^2$, explanations will vary.
 - $2 \frac{31}{32} \text{ yd}^2$, explanations will vary.
- $290 \frac{11}{12} \text{ ft}^2$
- $10 \frac{9}{16} \text{ in}^2$
 - $84 \frac{1}{2} \text{ in}^2$

Exit Ticket

$$2 \frac{1}{4} \text{ in}, 1 \frac{1}{2} \text{ in}; \text{ area} = 3 \frac{3}{8} \text{ in}^2$$

Homework

- Rectangle labeled; $6 \frac{1}{8} \text{ in}^2$
 - Rectangle labeled; $1 \frac{11}{16} \text{ in}^2$
 - Rectangle labeled; $5 \frac{1}{16} \text{ in}^2$
 - Rectangle labeled; $4 \frac{1}{8} \text{ in}^2$
 - Rectangle labeled; $\frac{7}{8} \text{ in}^2$
- Area model drawn; $\frac{9}{16} \text{ yd}^2$
 - Area model drawn; $3 \frac{1}{8} \text{ ft}^2$
- No; answers will vary.
- $6 \frac{1}{4} \text{ ft}^2$
 - 266 ft^2

Lesson 13

Problem Set

- 3 km^2
 - $69\frac{3}{10} \text{ m}^2$
 - $24\frac{5}{9} \text{ yd}^2$
 - $3\frac{19}{24} \text{ mi}^2$
- $38\frac{2}{15} \text{ in}^2$
- $562\frac{1}{2} \text{ yd}^2$

Exit Ticket

- $9\frac{4}{5} \text{ mm}^2$
- $26\frac{7}{16} \text{ km}^2$

Homework

- 16 cm^2
 - $21\frac{3}{5} \text{ ft}^2$
 - $26\frac{1}{15} \text{ in}^2$
 - $4\frac{5}{7} \text{ m}^2$
- $77\frac{11}{32} \text{ in}^2$
- $374\frac{21}{80} \text{ ft}^2$

Lesson 14

Problem Set

- $71\frac{1}{2}\text{ ft}^2$
- $81\frac{1}{4}\text{ in}^2$
- $1,094\frac{5}{8}\text{ ft}^2$
- $1,656\frac{1}{9}\text{ ft}^2$
 - \$409.83
- Answers will vary.
 - The area of the quilt is $1,014\text{ in}^2$.

Exit Ticket

$$56\frac{7}{20}\text{ ft}^2.$$

Homework

- 180 ft^2
 $161\frac{2}{3}\text{ ft}^2$
- $307\frac{1}{16}\text{ in}^2$
- $383\frac{9}{10}\text{ ft}^2$
- $2,075\frac{7}{10}\text{ ft}^2$
5 bags for the highest setting;
7 bags for the lowest

Lesson 15

Problem Set

- $\frac{9}{16} \text{ m}^2$
- $\frac{25}{64} \text{ yd}^2$
 - $23\frac{1}{2} \text{ ft}$
 - $34\frac{33}{64} \text{ ft}^2$
- $11\frac{1}{4} \text{ ft}^2$
 - $5\frac{5}{8} \text{ ft}^2$
- $30\frac{9}{25} \text{ cm}^2$
 - $1\frac{3}{5} \text{ cm}$

Exit Ticket

$$220\frac{1}{2} \text{ in}^2$$

Homework

- $18\frac{3}{4} \text{ ft}^2$
- $1,642\frac{9}{16} \text{ ft}^2$
- $375\frac{3}{4} \text{ in}^2$

Lesson 17

Problem Set

1. Parallelograms will vary.
2. Answers will vary.
 - a. Answers will vary.
 - b. Answers will vary.
3. Parallelograms will vary.
 - a. Answers will vary.
 - b. Answers will vary.
4. Answers will vary.
 - a. Answers will vary.
 - b. Answers will vary.

Exit Ticket

1. Parallelograms will vary.
2. When it has two pairs of parallel lines

Homework

1.
 - a. Parallelograms will vary.
 - b. 120° ; 60° ; 120°
2.
 - a. 6 cm; 3 cm
 - b. 67° ; 113° ; 67°
3. 4; 4; 3; 6
4. Answers will vary.
5. Answers will vary.

Exit Ticket

1. Rhombuses will vary.
2. Rectangles will vary.

Homework

1.
 - a. Rhombuses will vary.
 - b. Rhombuses will vary.
 - c. Rectangles will vary.
 - d. Rectangles will vary.
2. 54.25 cm or $54\frac{1}{4}$ cm
3. Answers will vary.
4. Answers will vary.

Problem Set

1. Figures drawn.
2.
 - a. Answers will vary.
 - b. Answers will vary.
3.
 - a. Answers will vary.
 - b. Answers will vary.
 - c. When all four angles are 90°
 - d. When both pairs of adjacent sides are equal, and when all four angles are 90°
 - e. When all four sides and/or all four angles are equal.

Exit Ticket

1. All four sides are equal.
2. Kites have equal adjacent sides, but parallelograms have equal opposite sides.

Homework

1.
 - a. Kites will vary.
 - b. Quadrilateral that has two pairs of equal adjacent sides
 - c. Both pairs of sides are equal, or when it is a rhombus
2. It has right angles.
3. Squares will vary.
4. Explanations will vary.

Lesson 20

Problem Set

1.
 - a. T
 - b. F; answers will vary.
 - c. T
 - d. F; answers will vary.
 - e. T
 - f. T
 - g. F; answers will vary.
 - h. F; answers will vary.
 - i. T
 - j. F; answers will vary.
 - k. F; answers will vary.
2.
 - a. 140; 90; quadrilateral
 - b. 26 in; 26 in; 11 in; 55; 90; trapezoid, parallelogram, quadrilateral
 - c. 16 cm; 18 cm; 75; 105; 105; quadrilateral, trapezoid

Exit Ticket

Squares will vary.

- a. Equal adjacent sides
- b. All four sides equal
- c. All four right angles
- d. Both pairs of opposite sides equal and parallel
- e. At least one set of opposite parallel sides
- f. Four sides

Homework

1. Square; rectangle; rhombus; parallelogram; kite; trapezoid
2. 9.9; 9.9; 28; 90; 90

Problem Set

1. Answers will vary.
2. Answers will vary.
3. Answers will vary.

Exit Ticket

1. Parallelograms; trapezoids; trapezoids; parallelograms
2. Rhombuses; kites; kites; rhombuses

Homework

1.
 - a. Always
 - b. Sometimes
 - c. Always
 - d. Always
 - e. Always
 - f. Sometimes
 - g. Sometimes
 - h. Drawings will vary.
2.
 - a. Explanations will vary.
 - b. Explanations will vary.