



Answer Key

GRADE 3 • MODULE 7

Geometry and Measurement Word Problems

Lesson 1

Pattern Sheet

3	6	9	12
15	3	6	3
9	3	12	3
15	3	6	9
6	12	6	15
6	3	6	9
3	9	6	9
12	9	15	9
12	3	12	6
12	9	12	15
12	15	3	15
6	15	9	15
12	6	12	9
15	9	6	12
9	15	6	12

Problem Set

- \$22
 - 5
 - 7 minutes
- 4
 - \$4
 - 24

Exit Ticket

289

Homework

- \$34
 - 4
 - 7 minutes
- 9
 - \$2
 - 32

Lesson 2

Pattern Sheet

3	6	9	12
15	18	21	24
27	30	15	18
15	21	15	24
15	27	15	30
18	15	18	21
18	24	18	27
18	21	18	21
24	21	27	21
24	18	24	21
24	27	27	18
27	21	27	24
27	24	18	27
21	27	18	24
27	21	18	24

Problem Set

- 8
- 375 milliliters
- 240 square inches
- 3
- 311 grams
- 88 centimeters

Exit Ticket

40 milliliters

Homework

- 50 grams
- 7
- 360 square inches
- 4
- 307 grams
- 11 centimeters

Lesson 3

Pattern Sheet

4	8	12	16
20	4	8	4
12	4	16	4
20	4	8	12
8	16	8	20
8	4	8	12
4	12	8	12
16	12	20	12
16	4	16	8
16	12	16	20
16	20	4	20
8	20	12	20
16	8	16	12
20	12	8	16
12	20	8	16

Problem Set

- 9 milliliters
- 102 feet
- 49 grams
- 19 minutes
- 7
- 7 centimeters

Exit Ticket

72 ounces

Homework

- 10 milliliters
- 21 minutes
- 120
- a. \$65
b. \$194
- 6 inches

Lesson 4

Pattern Sheet

4	8	12	16
20	24	28	32
36	40	20	24
20	28	20	32
20	36	20	40
24	20	24	28
24	32	24	36
24	28	24	28
32	28	36	28
32	24	32	28
32	36	36	24
36	28	36	32
36	32	24	36
28	36	24	32
36	28	24	32

Problem Set

- Answer provided
 A–L; one polygon sketched
 B, C, E, F, G, H, I, J, L; one polygon sketched
 B, C, F, G, H, I, L; one polygon sketched
 B, C, F, H; one polygon sketched
 C, F; one polygon sketched
- A–L; explanations will vary.
- Polygon sketched and traced; explanations will vary.
- Diagonal line drawn in chart polygons; answers will vary.

Exit Ticket

1. Rhombus, 4 equal sides, 2 sets of parallel sides
2. Trapezoid, 4 sides, 1 set of parallel sides

Homework

1. Answer provided
True
True
False
True
2. a. Parallel sides traced with a colored pencil
b. A shape with at least 1 set of parallel sides drawn

Lesson 5

Pattern Sheet

5	10	15	20
25	5	10	5
15	5	20	5
25	5	10	15
10	20	10	25
10	5	10	15
5	15	10	15
20	15	25	15
20	5	20	10
20	15	20	25
20	25	5	25
10	25	15	25
20	10	20	15
25	15	10	20
15	25	10	20

Problem Set

- Answer provided
M, P, S, U, W; one polygon sketched
N, O, R, T, Q, V, X; one polygon sketched
N, Q, T, S; one polygon sketched
M, N, R, P, S, U, T; one polygon sketched
- Answers will vary.
- No; answers will vary.
- U; hexagon
 - Drawings will vary.

Exit Ticket

1. No; explanations will vary.
2. 2; right angles circled
3. 1
4. Pentagon

Homework

1. Hexagon matches *At least 1 right angle* and *All sides are not equal*
Rectangle matches *At least 1 right angle*, *All sides are not equal*, and *At least 1 set of parallel sides*
Regular octagon matches *All sides are equal* and *At least 1 set of parallel sides*
Decagon matches *All sides are not equal*
Pentagon matches *All sides are not equal*
Square matches *All sides are equal*, *At least 1 right angle*, and *At least 1 set of parallel sides*
2. Answers will vary.
3. Yes; explanations will vary.

Lesson 6

Problem Set

1. Right triangle drawn
2. Square with side lengths of 2 inches drawn
3. Quadrilateral drawn; parallel sides traced in green
4. Pentagon with at least 2 equal sides drawn; equal side lengths labeled
5. Hexagon with at least 2 equal sides drawn; equal side lengths labeled
6. No; explanations and drawings will vary.

Exit Ticket

Rectangle drawn

Homework

1. Triangle with no right angles drawn
2. Square or a rectangle drawn
3. Quadrilateral with 2 equal sides drawn; equal side lengths labeled
4. Hexagon with at least 2 equal sides drawn; equal side lengths labeled
5. Pentagon with at least 2 equal sides drawn; equal side lengths labeled
6. Regular triangle with side lengths of 4 cm drawn

Lesson 7

Pattern Sheet

5	10	15	20
25	30	35	40
45	50	25	30
25	35	25	40
25	45	25	50
30	25	30	35
30	40	30	45
30	35	30	35
40	35	45	35
40	30	40	35
40	45	45	30
45	35	45	40
45	40	30	45
35	45	30	40
45	35	30	40

Problem Set

1. Grid colored
2. Grid colored
 - a. Number sentence will vary.
 - b. Number sentence will vary.
3.
 - a. Grid colored
 - b. Explanations will vary.
4. Answers will vary.

Exit Ticket

Grid colored

Homework

1. 3 rectangles colored
2.
 - a. Square with 16 units colored
 - b. 2 rectangles with 24 units colored
3. Explanations will vary.

Lesson 8

Pattern Sheet

6	12	18	24
30	6	12	6
18	6	24	6
30	6	12	18
12	24	12	30
12	6	12	18
6	18	12	18
24	18	30	18
24	6	24	12
24	18	24	30
24	30	6	30
12	30	18	30
24	12	24	18
30	18	12	24
18	30	12	24

Problem Set

- 2 right triangles drawn and labeled
- 2 smaller triangles drawn and labeled
- Trapezoid and triangle drawn and labeled
- 2 smaller trapezoids drawn and labeled
- Square and triangle drawn and labeled
- Parallelogram and triangle drawn and labeled
- Lines drawn correctly inside the square
 - Descriptions and explanations will vary.

Exit Ticket

3 shapes traced and labeled; one common attribute described

Homework

1. Line drawn to divide square
2. Line drawn to divide triangle
3. Line drawn to divide trapezoid
4. Line drawn to divide quadrilateral
5. 4 lines drawn to divide square into 8 equal triangles
6. Descriptions will vary.

Lesson 9

Pattern Sheet

6	12	18	24
30	36	42	48
54	60	30	36
30	42	30	48
30	54	30	60
36	30	36	42
36	48	36	54
36	42	36	42
48	42	54	42
48	36	48	42
48	54	54	36
54	42	54	48
54	48	36	54
42	54	36	48
54	42	36	48

Problem Set

- Drawings will vary.
 - Drawings will vary.
 - Drawings will vary.
 - Drawings will vary.
- Drawings will vary.
- Drawings will vary.
- Outlines and descriptions will vary.

Exit Ticket

Sketches will vary.

Homework

1.
 - a. Drawings will vary.
 - b. Drawings will vary.
 - c. Drawings will vary.
 - d. Drawings will vary.
2. Lines are drawn correctly on the cat.
3. Drawings will vary.

Lesson 10

Pattern Sheet

7	14	21	28
35	7	14	7
21	7	28	7
35	7	14	21
14	28	14	35
14	7	14	21
7	21	14	21
28	21	35	21
28	7	28	14
28	21	28	35
28	35	7	35
14	35	21	35
28	14	28	21
35	21	14	28
21	35	14	28

Problem Set

- 2-inch square traced with red crayon
 - New shape traced with red crayon
 - Answers will vary.
 - Shapes colored with blue crayon
 - Red; explanations will vary.
 - Area; explanations will vary.
 - Neither; explanations will vary.
- Perimeters of shapes outlined with red crayon
 - Explanations will vary.
- Paper outlined with highlighter

Exit Ticket

1. Outside edges colored purple; inside colored yellow
2. Purple; explanations will vary.

Homework

1. Perimeter of each shape traced
 - a. Explanations will vary.
 - b. Explanations will vary.
2. Rectangle drawn on grid
 - a. Perimeter traced
 - b. Area shaded
 - c. Explanations will vary.
3. Maya; explanations will vary.

Lesson 11

Problem Set

- Answers will vary.
 - Answers will vary.
 - Answers will vary.
 - Answers will vary.
- Answers will vary.
- Answers will vary.
- Answers will vary.

Exit Ticket

Drawings will vary.

Homework

- Shape outlined with highlighter
 - Explanations will vary.
 - 18
 - Shape shaded in with colored pencil
- Drawings will vary.
- Frank; explanations will vary.
- Triangle drawn correctly
 - Yes, explanations will vary.

Lesson 12

Pattern Sheet

7	14	21	28
35	42	49	56
63	70	35	42
35	49	35	56
35	63	35	70
42	35	42	49
42	56	42	63
42	49	42	49
56	49	63	49
56	42	56	49
56	63	63	42
63	49	63	56
63	56	42	63
49	63	42	56
63	49	42	56

Problem Set

- Labeled each side 3 cm; $3\text{ cm} + 3\text{ cm} + 3\text{ cm} + 3\text{ cm} = 12\text{ cm}$
 - Labeled each side 3 cm; $3\text{ cm} + 3\text{ cm} + 3\text{ cm} + 3\text{ cm} + 3\text{ cm} + 3\text{ cm} = 18\text{ cm}$
 - Labeled each side 4 cm; $4\text{ cm} + 4\text{ cm} + 4\text{ cm} + 4\text{ cm} = 16\text{ cm}$
 - Labeled 6 cm, 6 cm, 5 cm; $6\text{ cm} + 6\text{ cm} + 5\text{ cm} = 17\text{ cm}$
 - Labeled 3 cm, 3 cm, 2 cm, 3 cm, 1 cm, 6 cm; $3\text{ cm} + 3\text{ cm} + 2\text{ cm} + 3\text{ cm} + 1\text{ cm} + 6\text{ cm} = 18\text{ cm}$
- Labeled each side 3 cm; Perimeter = $3\text{ cm} + 3\text{ cm} + 3\text{ cm} + 3\text{ cm} = 12\text{ cm}$
- Shapes labeled; Daisy; explanations will vary.
- Explanations will vary; 16 cm

Exit Ticket

4 cm, 2 cm, 2 cm, 4 cm, 2 cm, 2 cm, 4 cm, 2 cm, 2 cm, 4 cm, 2 cm, 2 cm;

$4\text{ cm} + 2\text{ cm} + 2\text{ cm} + 4\text{ cm} + 2\text{ cm} + 2\text{ cm} + 4\text{ cm} + 2\text{ cm} + 2\text{ cm} + 4\text{ cm} + 2\text{ cm} + 2\text{ cm} = 32\text{ cm}$

Homework

1.
 - a. Labeled 3 cm, 4 cm, 5 cm; $3\text{ cm} + 4\text{ cm} + 5\text{ cm} = 12\text{ cm}$
 - b. Labeled 6 cm, 4 cm, 6 cm, 4 cm; $6\text{ cm} + 4\text{ cm} + 6\text{ cm} + 4\text{ cm} = 20\text{ cm}$
 - c. Labeled 3 cm, 4 cm, 5 cm, 4 cm; $3\text{ cm} + 4\text{ cm} + 5\text{ cm} + 4\text{ cm} = 16\text{ cm}$
 - d. Labeled each side 5 cm; $5\text{ cm} + 5\text{ cm} + 5\text{ cm} + 5\text{ cm} = 20\text{ cm}$
 - e. Labeled 4 cm, 2 cm, 3 cm, 8 cm, 3 cm, 2 cm, 4 cm, 12 cm;
 $4\text{ cm} + 2\text{ cm} + 3\text{ cm} + 8\text{ cm} + 3\text{ cm} + 2\text{ cm} + 4\text{ cm} + 12\text{ cm} = 38\text{ cm}$
2. 3 cm each side; $P = 3\text{ cm} + 3\text{ cm} + 3\text{ cm} + 3\text{ cm} + 3\text{ cm} + 3\text{ cm} = 18\text{ cm}$
3. No; explanations will vary.
4. No; explanations will vary.

Lesson 13

Pattern Sheet

8	16	24	32
40	8	16	8
24	8	32	8
40	8	16	24
16	32	16	40
16	8	16	24
8	24	16	24
32	24	40	24
32	8	32	16
32	24	32	40
32	40	8	40
16	40	24	40
32	16	32	24
40	24	16	32
24	40	16	32

Problem Set

- 22
 - 4, 4, 4, 4; 16
 - 11, 9, 6; 26
 - 15, 5, 9, 7; 36
 - 9, 9, 2, 2, 3; 25
- 52 m
- 24 in
 - Yes; 5 sides

Exit Ticket

Shape B; explanations will vary.

Homework

1. Shape q: Answer provided
Shape r: $P = 6 \text{ ft} + 9 \text{ ft} + 6 \text{ ft} + 6 \text{ ft} + 9 \text{ ft}$; $P = 36 \text{ ft}$
Shape s: $P = 7 \text{ cm} + 5 \text{ cm} + 7 \text{ cm} + 5 \text{ cm}$; $P = 24 \text{ cm}$
Shape a: $P = 9 \text{ yd} + 7 \text{ yd} + 5 \text{ yd} + 7 \text{ yd}$; $P = 28 \text{ yd}$
Shape m: $P = 4 \text{ in} + 4 \text{ in} + 4 \text{ in} + 4 \text{ in}$; $P = 16 \text{ in}$
Shape e: $P = 8 \text{ cm} + 5 \text{ cm} + 8 \text{ cm} + 5 \text{ cm}$; $P = 26 \text{ cm}$
Shape u: $P = 6 \text{ m} + 3 \text{ m} + 7 \text{ m} + 4 \text{ m}$; $P = 20 \text{ m}$
Shape l: $P = 4 \text{ m} + 3 \text{ m} + 4 \text{ m} + 2 \text{ m} + 2 \text{ m}$; $P = 15 \text{ m}$
Square meals
2. 160 ft
3. a. 33 in
b. Yes; 8 sides

Lesson 14

Pattern Sheet

8	16	24	32
40	48	56	64
72	80	40	48
40	56	40	64
40	72	40	80
48	40	48	56
48	64	48	72
48	56	48	56
64	56	72	56
64	48	64	56
64	72	72	48
72	56	72	64
72	64	48	72
56	72	48	64
72	56	48	64

Problem Set

- Labeled each side 8 in; 56
 - Labeled each side 7 ft; 21
 - Labeled each side 9 m; 36
 - Labeled each side 6 in; 30
- Labeled 7 cm and 2 cm; 18
- 48 cm
- 34 in
- Both; explanations will vary.

Exit Ticket

Regular pentagon; work shown correctly

Homework

1.
 - a. Labeled each side 4 in; 12
 - b. Labeled each side 8 cm; 32
 - c. Labeled each side 9 m; 72
 - d. Labeled each side 6 in; 36
2. Labeled 4 cm and 9 cm; 26
3. 35 cm
4. 96 m
5. 38 in

Lesson 15

Pattern Sheet

9	18	27	36
45	9	18	9
27	9	36	9
45	9	18	27
18	36	18	45
18	9	18	27
9	27	18	27
36	27	45	27
36	9	36	18
36	27	36	45
36	45	9	45
18	45	27	45
36	18	36	27
45	27	18	36
27	45	18	36

Problem Set

- 22 ft
- 165 cm
- 34 yd
- 180 in
- 640 yd
- 216 in

Exit Ticket

36 yd

Homework

- 26 in
- 40 ft
- 160 yd
- 36 in
- 64 ft
- 32 ft

Lesson 16

Pattern Sheet

9	18	27	36
45	54	63	72
81	90	45	54
45	63	45	72
45	81	45	90
54	45	54	63
54	72	54	81
54	63	54	63
72	63	81	63
72	54	72	63
72	81	81	54
81	63	81	72
81	72	54	81
63	81	54	72
81	63	54	72

Problem Set

- Answers will vary.
 - Explanations will vary.
 - Yes, explanations will vary.
- No; explanations will vary.
- No; explanations will vary.
- No; explanations will vary.

Exit Ticket

Answers will vary.

Homework

1.
 - a. Answers will vary.
 - b. Explanations will vary.
2. Shape A: $7\frac{3}{4}$ in; Shape B: $8\frac{3}{4}$ in
 - a. Shape B
 - b. About 1 in; answers may vary.
3. Answers will vary.

Lesson 17

Problem Set

- Labeled 1 cm, 2 cm; $P = (3 \times 2 \text{ cm}) + 1 \text{ cm} + 3 \text{ cm} + 4 \text{ cm} = 14 \text{ cm}$ (equations may vary)
 - Labeled 1 ft, 1 ft, 2 ft; $P = (4 \times 2 \text{ ft}) + (3 \times 1 \text{ ft}) + 5 \text{ ft} = 16 \text{ ft}$ (equations may vary)
 - Labeled 2 m, 2 m, 4 m; $P = (5 \times 2 \text{ m}) + (2 \times 4 \text{ m}) + 6 \text{ m} = 24 \text{ m}$ (equations may vary)
 - Labeled 2 yd, 1 yd, 2 yd; $P = (7 \times 2 \text{ yd}) + 7 \text{ yd} + 1 \text{ yd} + 4 \text{ yd} = 26 \text{ yd}$ (equations may vary)
- 48 cm
- $a = 8 \text{ in}$, $b = 5 \text{ in}$; 26 in

Exit Ticket

$a = 7 \text{ m}$, $b = 8 \text{ m}$; 30 m

Homework

- Labeled 3 m, 7 m; $P = (2 \times 7 \text{ m}) + 3 \text{ m} + 2 \text{ m} + 9 \text{ m} + 4 \text{ m} = 32 \text{ m}$ (equations may vary)
 - Labeled 4 cm; $P = (2 \times 2 \text{ cm}) + (2 \times 4 \text{ cm}) + 3 \text{ cm} + 5 \text{ cm} + 6 \text{ cm} + 8 \text{ cm} = 34 \text{ cm}$ (equations may vary)
 - Labeled 2 in, 6 in, 4 in; $P = (2 \times 2 \text{ in}) + (3 \times 4 \text{ in}) + (2 \times 6 \text{ in}) + 12 \text{ in} = 40 \text{ in}$ (equations may vary)
 - Labeled 3 ft, 3 ft; $P = (4 \times 3 \text{ ft}) + 1 \text{ ft} + 2 \text{ ft} + 7 \text{ ft} + 8 \text{ ft} = 30 \text{ ft}$ (equations may vary)
- 72 cm
- $a = 13 \text{ in}$, $b = 6 \text{ in}$; 38 in

Lesson 18

Problem Set

- 4 rectangles drawn and labeled correctly
 - Answers will vary.
- 3 rectangles drawn and labeled correctly
 - 16 units, explanations will vary.
- Yes; explanations will vary.

Exit Ticket

- 1; 26 cm
4; 14 cm
2; 16 cm

Homework

- 3 rectangles shaded correctly on the grid
- Answers will vary.
- 3 rectangles drawn with side lengths labeled correctly
 - Answers will vary.
 - Answers and explanations will vary.

Lesson 19

Problem Set

- 1, 1, 13; 2, 1, 14, 2, 7; 2, 1, 15, 3, 5; 3, 1, 16, 2, 8, 4, 4; 1, 1, 17; 3, 1, 18, 2, 9, 3, 6
- Line plot created
- 12, 16, and 18 unit squares
- Answers will vary.

Exit Ticket

3, 1, 20, 2, 10, 4, 5

Homework

- 2, 1, 2, 2, 3; 1, 1, 7; 2, 1, 8, 2, 4; 2, 1, 9, 3, 3; 2, 1, 10, 2, 5; 1, 1, 11
- Line plot created
 - No; explanations will vary.
 - 2; explanations will vary.

Lesson 20

Sprint

Side A

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

Side B

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

Problem Set

1.
 - a. 3 rectangles drawn and labeled
 - b. Answers will vary.
 - c. Answers will vary.
 - d. Areas are different
2.
 - a. 3 rectangles drawn and labeled
 - b. Answers will vary.
 - c. Answers will vary.

Exit Ticket

- a. 2 rectangles are drawn and labeled
- b. 3 square units, 4 square units

Homework

1.
 - a. 2 rectangles drawn and labeled
 - b. 4 square units, 6 square units
2. Yes; explanations will vary.
3.
 - a. 5 cm by 5 cm square drawn and labeled
 - b. 25 sq cm
 - c. Different rectangle drawn
 - d. Katie's square

Lesson 21

Sprint

Side A

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

Side B

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

Problem Set

1.
 - a. 4 rectangles sketched and labeled
 - b. Answers will vary.
2.
 - a. 4 rectangles sketched and labeled
 - b. Answers will vary.
3.
 - a. 2, 2 cm, 3 cm, 6 sq cm
5, 2 cm, 8 cm, 16 sq cm; 3 cm 7 cm, 21 sq cm; 4 cm, 6 cm, 24 sq cm; 5 cm, 5 cm, 25 sq cm
 - b. Yes, explanations will vary.
4. Answers will vary.

Exit Ticket

Answers will vary.

Homework

1.
 - a. 3 rectangles shaded and labeled
 - b. 6 sq cm, 10 sq cm, 12 sq cm
 - c. Answers will vary.
2.
 - a. 4, 2 units, 7 units, 14 sq units; 3 units, 6 units, 18 sq units; 4 units, 5 units, 20 sq units
 - b. Explanations will vary.
3. Answers will vary.

Lesson 22

Sprint

Side A

- | | | | |
|--------|--------|--------|--------|
| 1. 8 | 12. 28 | 23. 10 | 34. 8 |
| 2. 12 | 13. 32 | 24. 2 | 35. 7 |
| 3. 16 | 14. 36 | 25. 3 | 36. 9 |
| 4. 20 | 15. 40 | 26. 10 | 37. 6 |
| 5. 4 | 16. 8 | 27. 5 | 38. 8 |
| 6. 2 | 17. 7 | 28. 1 | 39. 44 |
| 7. 3 | 18. 9 | 29. 2 | 40. 11 |
| 8. 5 | 19. 6 | 30. 3 | 41. 3 |
| 9. 1 | 20. 10 | 31. 6 | 42. 12 |
| 10. 4 | 21. 5 | 32. 7 | 43. 56 |
| 11. 24 | 22. 1 | 33. 9 | 44. 14 |

Side B

- | | | | |
|--------|--------|--------|--------|
| 1. 4 | 12. 24 | 23. 2 | 34. 7 |
| 2. 8 | 13. 28 | 24. 10 | 35. 8 |
| 3. 12 | 14. 32 | 25. 3 | 36. 9 |
| 4. 16 | 15. 36 | 26. 2 | 37. 6 |
| 5. 20 | 16. 7 | 27. 1 | 38. 7 |
| 6. 3 | 17. 6 | 28. 10 | 39. 44 |
| 7. 2 | 18. 8 | 29. 5 | 40. 11 |
| 8. 4 | 19. 10 | 30. 3 | 41. 48 |
| 9. 1 | 20. 9 | 31. 3 | 42. 12 |
| 10. 5 | 21. 1 | 32. 4 | 43. 52 |
| 11. 40 | 22. 5 | 33. 9 | 44. 13 |

Problem Set

1. Line plot created
2. Answers will vary.
3. No
4. No; explanations will vary.
5. Explanations will vary.

Exit Ticket

Answers will vary.

Homework

1.
 - a. Explanations will vary; no
 - b. No; whole number side lengths
 - c. 8; explanations will vary.
2. No; explanations will vary.
3. Explanations will vary.

Lesson 23

Sprint

Side A

- | | | | |
|--------|--------|--------|--------|
| 1. 10 | 12. 35 | 23. 10 | 34. 8 |
| 2. 15 | 13. 40 | 24. 2 | 35. 7 |
| 3. 20 | 14. 45 | 25. 3 | 36. 9 |
| 4. 25 | 15. 50 | 26. 10 | 37. 6 |
| 5. 5 | 16. 8 | 27. 5 | 38. 8 |
| 6. 2 | 17. 7 | 28. 1 | 39. 55 |
| 7. 3 | 18. 9 | 29. 2 | 40. 11 |
| 8. 5 | 19. 6 | 30. 3 | 41. 3 |
| 9. 1 | 20. 10 | 31. 6 | 42. 12 |
| 10. 4 | 21. 5 | 32. 7 | 43. 60 |
| 11. 30 | 22. 1 | 33. 9 | 44. 14 |

Side B

- | | | | |
|--------|--------|--------|--------|
| 1. 5 | 12. 30 | 23. 2 | 34. 7 |
| 2. 10 | 13. 35 | 24. 10 | 35. 8 |
| 3. 15 | 14. 40 | 25. 3 | 36. 9 |
| 4. 20 | 15. 45 | 26. 2 | 37. 6 |
| 5. 25 | 16. 7 | 27. 1 | 38. 7 |
| 6. 3 | 17. 6 | 28. 10 | 39. 55 |
| 7. 2 | 18. 8 | 29. 5 | 40. 11 |
| 8. 4 | 19. 10 | 30. 3 | 41. 60 |
| 9. 1 | 20. 9 | 31. 3 | 42. 12 |
| 10. 5 | 21. 1 | 32. 4 | 43. 65 |
| 11. 50 | 22. 5 | 33. 9 | 44. 13 |

Problem Set

- 6 cm
- 184 in
- 8 ft
- 96 in
- \$40
- Yes

Exit Ticket

9 cm

Homework

- 9 in
- 144 in
- 250 ft
- 99 in
- 24 in
- 76 in

Lesson 24

Pattern Sheet

6	12	18	24
30	36	42	48
54	60	30	36
30	42	30	48
30	54	30	60
36	30	36	42
36	48	36	54
36	42	36	42
48	42	54	42
48	36	48	42
48	54	54	36
54	42	54	48
54	48	36	54
42	54	36	48
54	42	36	48

Problem Set

- | | |
|--|---|
| A. Width and length will vary. | J. Estimated and measured with string |
| B. Width and length will vary. | K. Width and length will vary. |
| C. Width and length will vary. | L. Estimated and measured with string |
| D. Width and length will vary. | M. Width and length will vary. |
| E. 28; width and length will vary. | N. Estimated and measured with string |
| F. Width and length will vary. | O. Width and length will vary. |
| G. 8; width and length will vary. | P. Extra items and information will vary. |
| H. Extra body parts and information will vary. | Q. Extra items and information will vary. |
| I. Extra body parts and information will vary. | |

Exit Ticket

Answers will vary.

Homework

1. 6 in
2.
 - a. Answers will vary.
 - b. Answers will vary.
 - c. Answers will vary.
3.
 - a. 1 cm by 2 cm
1 cm by 4 cm or 2 cm by 3 cm
1 cm by 6 cm, 2 cm by 5 cm, or 3 cm by 4 cm
 - b. 1 cm by 5 cm, 2 cm by 4 cm, or 3 cm by 3 cm
1 cm by 9 cm, 2 cm by 8 cm, 3 cm by 7 cm, 4 cm by 6 cm, or 5 cm by 5 cm
1 cm by 13 cm, 2 cm by 12 cm, 3 cm by 11 cm, 4 cm by 10 cm, 5 cm by 9 cm, 6 cm by 8 cm, or
7 cm by 7 cm

Lesson 25

Sprint

Side A

- | | | | |
|--------|--------|--------|--------|
| 1. 12 | 12. 42 | 23. 10 | 34. 8 |
| 2. 18 | 13. 48 | 24. 2 | 35. 7 |
| 3. 24 | 14. 54 | 25. 3 | 36. 9 |
| 4. 30 | 15. 60 | 26. 10 | 37. 6 |
| 5. 6 | 16. 8 | 27. 5 | 38. 8 |
| 6. 2 | 17. 7 | 28. 1 | 39. 66 |
| 7. 3 | 18. 9 | 29. 2 | 40. 11 |
| 8. 5 | 19. 6 | 30. 3 | 41. 72 |
| 9. 1 | 20. 10 | 31. 6 | 42. 12 |
| 10. 4 | 21. 5 | 32. 7 | 43. 84 |
| 11. 36 | 22. 1 | 33. 9 | 44. 14 |

Side B

- | | | | |
|--------|--------|--------|--------|
| 1. 6 | 12. 36 | 23. 2 | 34. 7 |
| 2. 12 | 13. 42 | 24. 10 | 35. 8 |
| 3. 18 | 14. 48 | 25. 3 | 36. 9 |
| 4. 24 | 15. 54 | 26. 2 | 37. 6 |
| 5. 30 | 16. 7 | 27. 1 | 38. 7 |
| 6. 3 | 17. 6 | 28. 10 | 39. 66 |
| 7. 2 | 18. 8 | 29. 5 | 40. 11 |
| 8. 4 | 19. 10 | 30. 3 | 41. 72 |
| 9. 1 | 20. 9 | 31. 3 | 42. 12 |
| 10. 5 | 21. 1 | 32. 4 | 43. 78 |
| 11. 60 | 22. 5 | 33. 9 | 44. 13 |

Problem Set

Pictures and labels will vary.

Exit Ticket

- Answers will vary.
 - Answers will vary.
- Answers will vary.

Homework

- Answer provided
- $P = 4 \times 2 \text{ cm}$, or $P = 2 \text{ cm} + 2 \text{ cm} + 2 \text{ cm} + 2 \text{ cm}$
 $P = 8 \text{ cm}$
- $P = 8 \text{ cm} + 6 \text{ cm} + 8 \text{ cm} + 6 \text{ cm}$
 $P = 28 \text{ cm}$
- $P = 2 \text{ cm} + 5 \text{ cm} + 2 \text{ cm} + 5 \text{ cm}$
 $P = 14 \text{ cm}$
- $P = 2 \text{ cm} + 5 \text{ cm} + 2 \text{ cm} + 5 \text{ cm}$
 $P = 14 \text{ cm}$
- $P = 7 \text{ cm} + 2 \text{ cm} + 7 \text{ cm} + 2 \text{ cm}$
 $P = 18 \text{ cm}$
- $P = 7 \text{ cm} + 2 \text{ cm} + 7 \text{ cm} + 2 \text{ cm}$
 $P = 18 \text{ cm}$

Lesson 26

Pattern Sheet

7	14	21	28
35	42	49	56
63	70	35	42
35	49	35	56
35	63	35	70
42	35	42	49
42	56	42	63
42	49	42	49
56	49	63	49
56	42	56	49
56	63	63	42
63	49	63	56
63	56	42	63
49	63	42	56
63	49	42	56

Problem Set

- Answers will vary.
 - Answers will vary.
- Answers will vary.
- Explanations will vary.
- Answers will vary.

Exit Ticket

- Answers will vary.
- Answers will vary.

Homework

1.
 - a. 16 cm
 - b. 16 cm
 - c. 16 sq cm
 - d. 15 sq cm
 - e. Explanations will vary.
2.
 - a. Answers will vary.
 - b. Yes; explanations will vary.
 - c. 4 cm by 10 cm

Lesson 27

Sprint

Side A

- | | | | |
|--------|--------|--------|--------|
| 1. 14 | 12. 49 | 23. 10 | 34. 8 |
| 2. 21 | 13. 56 | 24. 2 | 35. 7 |
| 3. 28 | 14. 63 | 25. 3 | 36. 9 |
| 4. 35 | 15. 70 | 26. 10 | 37. 6 |
| 5. 7 | 16. 8 | 27. 5 | 38. 8 |
| 6. 2 | 17. 7 | 28. 1 | 39. 77 |
| 7. 3 | 18. 9 | 29. 2 | 40. 11 |
| 8. 5 | 19. 6 | 30. 3 | 41. 84 |
| 9. 1 | 20. 10 | 31. 6 | 42. 12 |
| 10. 4 | 21. 5 | 32. 7 | 43. 98 |
| 11. 42 | 22. 1 | 33. 9 | 44. 14 |

Side B

- | | | | |
|--------|--------|--------|--------|
| 1. 7 | 12. 42 | 23. 2 | 34. 7 |
| 2. 14 | 13. 49 | 24. 10 | 35. 8 |
| 3. 21 | 14. 56 | 25. 3 | 36. 9 |
| 4. 28 | 15. 63 | 26. 2 | 37. 6 |
| 5. 35 | 16. 7 | 27. 1 | 38. 7 |
| 6. 3 | 17. 6 | 28. 10 | 39. 77 |
| 7. 2 | 18. 8 | 29. 5 | 40. 11 |
| 8. 4 | 19. 10 | 30. 3 | 41. 84 |
| 9. 1 | 20. 9 | 31. 3 | 42. 12 |
| 10. 5 | 21. 1 | 32. 4 | 43. 91 |
| 11. 70 | 22. 5 | 33. 9 | 44. 13 |

Problem Set**Part A**

1. Evaluations will vary.
2. Answers and calculations will vary.
3. Answers and calculations will vary.

Part B

4. Evaluations will vary.

Exit Ticket

1. Rectangle A: 5, 5; 20 cm; 25 sq cm
Rectangle B: 8, 2; 20 cm; 16 sq cm
2. Answers will vary.

Homework

1. Rectangle A: 6, 6; 24 cm; 36 sq cm
Rectangle B: 4, 8; 24 cm; 32 sq cm
Rectangle C: 11, 1; 24 cm; 11 sq cm
Rectangle D: 5, 5; 20 cm; 25 sq cm
Rectangle E: 2, 8; 20 cm; 16 sq cm
Rectangle F: 4, 6; 20 cm; 24 sq cm
2. Answers will vary.
3. Answers will vary.
4. A, D; A

Lesson 28

Pattern Sheet

8	16	24	32
40	48	56	64
72	80	40	48
40	56	40	64
40	72	40	80
48	40	48	56
48	64	48	72
48	56	48	56
64	56	72	56
64	48	64	56
64	72	72	48
72	56	72	64
72	64	48	72
56	72	48	64
72	56	48	64

Problem Set

1.
 - a. 7 yd by 9 yd rectangle drawn and labeled correctly
 - b. 63 sq yd
 - c. 32 yd
2.
 - a. 8 cm by 8 cm square drawn and labeled correctly
 - b. 64 sq cm
 - c. 32 cm
 - d. 64 cm
3.
 - a. Drawings will vary.
 - b. 9 in
 - c. 34 in
 - d. 217 sq in
4.
 - a. Drawings will vary.
 - b. 8 ft
 - c. 72 sq ft
 - d. 48 sq ft

Exit Ticket

- a. 6 ft by 8 ft rectangle drawn and labeled correctly
- b. 48 sq ft
- c. 28 ft

Homework

1.
 - a. 7 cm by 7 cm square drawn and labeled correctly
 - b. 49 sq cm
 - c. 28 cm
 - d. 42 cm
2.
 - a. Drawings will vary.
 - b. 6 ft
 - c. 18 sq ft
 - d. 54 sq ft

Lesson 29

Sprint

Side A

- | | | | |
|--------|--------|--------|---------|
| 1. 16 | 12. 56 | 23. 10 | 34. 8 |
| 2. 24 | 13. 64 | 24. 2 | 35. 7 |
| 3. 32 | 14. 72 | 25. 3 | 36. 9 |
| 4. 40 | 15. 80 | 26. 10 | 37. 6 |
| 5. 8 | 16. 8 | 27. 5 | 38. 8 |
| 6. 2 | 17. 7 | 28. 1 | 39. 88 |
| 7. 3 | 18. 9 | 29. 2 | 40. 11 |
| 8. 5 | 19. 6 | 30. 3 | 41. 96 |
| 9. 1 | 20. 10 | 31. 6 | 42. 12 |
| 10. 4 | 21. 5 | 32. 7 | 43. 112 |
| 11. 48 | 22. 1 | 33. 9 | 44. 14 |

Side B

- | | | | |
|--------|--------|--------|---------|
| 1. 8 | 12. 48 | 23. 2 | 34. 7 |
| 2. 16 | 13. 56 | 24. 10 | 35. 8 |
| 3. 24 | 14. 64 | 25. 3 | 36. 9 |
| 4. 32 | 15. 72 | 26. 2 | 37. 6 |
| 5. 40 | 16. 7 | 27. 1 | 38. 7 |
| 6. 3 | 17. 1 | 28. 10 | 39. 88 |
| 7. 2 | 18. 8 | 29. 5 | 40. 11 |
| 8. 4 | 19. 10 | 30. 3 | 41. 96 |
| 9. 1 | 20. 9 | 31. 3 | 42. 12 |
| 10. 5 | 21. 1 | 32. 4 | 43. 104 |
| 11. 80 | 22. 5 | 33. 9 | 44. 13 |

Problem Set

1.
 - a. 56 in
 - b. 144 sq in
 - c. 72 in
2. 25 ft
3. 36 cm
4. 700 yd

Exit Ticket

64 cm

Homework

1.
 - a. 48 in
 - b. 128 sq in
 - c. 256 sq in
2.
 - a. 36 cm
 - b. 72 sq cm
3. 800 yd

Lesson 30

Pattern Sheet

9	18	27	36
45	54	63	72
81	90	45	54
45	63	45	72
45	81	45	90
54	45	54	63
54	72	54	81
54	63	54	63
72	63	81	63
72	54	72	63
72	81	81	54
81	63	81	72
81	72	54	81
63	81	54	72
81	63	54	72

Problem Set

Answers will vary.

Exit Ticket

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

Homework

Answers will vary.

Lesson 31

Sprint

Side A

- | | | | |
|--------|--------|--------|---------|
| 1. 18 | 12. 63 | 23. 10 | 34. 8 |
| 2. 27 | 13. 72 | 24. 2 | 35. 7 |
| 3. 36 | 14. 81 | 25. 3 | 36. 9 |
| 4. 45 | 15. 90 | 26. 10 | 37. 6 |
| 5. 9 | 16. 8 | 27. 5 | 38. 8 |
| 6. 2 | 17. 7 | 28. 1 | 39. 99 |
| 7. 3 | 18. 9 | 29. 2 | 40. 11 |
| 8. 5 | 19. 6 | 30. 3 | 41. 108 |
| 9. 1 | 20. 10 | 31. 6 | 42. 12 |
| 10. 4 | 21. 5 | 32. 7 | 43. 126 |
| 11. 54 | 22. 1 | 33. 9 | 44. 14 |

Side B

- | | | | |
|--------|--------|--------|---------|
| 1. 9 | 12. 54 | 23. 2 | 34. 7 |
| 2. 18 | 13. 63 | 24. 10 | 35. 8 |
| 3. 27 | 14. 72 | 25. 3 | 36. 9 |
| 4. 36 | 15. 81 | 26. 2 | 37. 6 |
| 5. 45 | 16. 7 | 27. 1 | 38. 7 |
| 6. 3 | 17. 6 | 28. 10 | 39. 99 |
| 7. 2 | 18. 8 | 29. 5 | 40. 11 |
| 8. 4 | 19. 10 | 30. 3 | 41. 108 |
| 9. 1 | 20. 9 | 31. 3 | 42. 12 |
| 10. 5 | 21. 1 | 32. 4 | 43. 117 |
| 11. 90 | 22. 5 | 33. 9 | 44. 13 |

Problem Set

Answers will vary.

Exit Ticket

Answers will vary.

Homework

1.
 - a. 18 square units
 - b. 9 square units
 - c. Half of the rectangle shaded
 - d. Answers will vary.
2. Explanations will vary.
3. Answers will vary.

Lesson 32

Sprint

Side A

- | | | | |
|--------|--------|--------|--------|
| 1. 2 | 12. 6 | 23. 14 | 34. 16 |
| 2. 4 | 13. 9 | 24. 25 | 35. 18 |
| 3. 6 | 14. 5 | 25. 30 | 36. 35 |
| 4. 4 | 15. 10 | 26. 35 | 37. 40 |
| 5. 8 | 16. 15 | 27. 20 | 38. 45 |
| 6. 12 | 17. 7 | 28. 24 | 39. 28 |
| 7. 6 | 18. 14 | 29. 28 | 40. 32 |
| 8. 12 | 19. 9 | 30. 15 | 41. 36 |
| 9. 8 | 20. 18 | 31. 18 | 42. 21 |
| 10. 16 | 21. 10 | 32. 21 | 43. 24 |
| 11. 3 | 22. 12 | 33. 14 | 44. 27 |

Side B

- | | | | |
|--------|--------|--------|--------|
| 1. 5 | 12. 4 | 23. 35 | 34. 40 |
| 2. 10 | 13. 6 | 24. 10 | 35. 45 |
| 3. 15 | 14. 4 | 25. 12 | 36. 14 |
| 4. 3 | 15. 8 | 26. 14 | 37. 16 |
| 5. 6 | 16. 12 | 27. 15 | 38. 18 |
| 6. 9 | 17. 6 | 28. 18 | 39. 21 |
| 7. 7 | 18. 12 | 29. 21 | 40. 24 |
| 8. 14 | 19. 8 | 30. 20 | 41. 27 |
| 9. 9 | 20. 16 | 31. 24 | 42. 28 |
| 10. 18 | 21. 25 | 32. 28 | 43. 32 |
| 11. 2 | 22. 30 | 33. 35 | 44. 36 |

Problem Set

- Answers will vary.
 - No, explanations will vary.
- A, C, D
 - Answers will vary.
 - Answers will vary.
- Circle shaded correctly
- Yes, explanations will vary.

Exit Ticket

- Yes; explanations will vary.
- Circle shaded

Homework

- Circles shaded correctly
- Answers will vary.
- No; explanations will vary.
- Marissa; explanations will vary.
 - Explanations will vary.
- Circle shaded

Lesson 33

Sprint

Side A

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

Side B

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

Problem Set

Answers will vary.

Exit Ticket

Answers will vary.

Homework

Answers will vary.

Lesson 34

Sprint

Side A

- | | | | |
|--------|--------|--------|--------|
| 1. 6 | 12. 5 | 23. 14 | 34. 9 |
| 2. 3 | 13. 12 | 24. 24 | 35. 42 |
| 3. 15 | 14. 3 | 25. 36 | 36. 49 |
| 4. 3 | 15. 28 | 26. 35 | 37. 7 |
| 5. 8 | 16. 2 | 27. 6 | 38. 7 |
| 6. 2 | 17. 6 | 28. 6 | 39. 36 |
| 7. 9 | 18. 2 | 29. 8 | 40. 64 |
| 8. 3 | 19. 24 | 30. 5 | 41. 9 |
| 9. 12 | 20. 4 | 31. 16 | 42. 7 |
| 10. 3 | 21. 2 | 32. 27 | 43. 9 |
| 11. 25 | 22. 24 | 33. 8 | 44. 8 |

Side B

- | | | | |
|-------|--------|--------|--------|
| 1. 10 | 12. 3 | 23. 14 | 34. 9 |
| 2. 5 | 13. 14 | 24. 24 | 35. 42 |
| 3. 6 | 14. 3 | 25. 36 | 36. 49 |
| 4. 2 | 15. 24 | 26. 35 | 37. 7 |
| 5. 6 | 16. 2 | 27. 6 | 38. 7 |
| 6. 3 | 17. 7 | 28. 6 | 39. 36 |
| 7. 16 | 18. 2 | 29. 8 | 40. 64 |
| 8. 4 | 19. 27 | 30. 5 | 41. 9 |
| 9. 12 | 20. 4 | 31. 16 | 42. 7 |
| 10. 4 | 21. 2 | 32. 27 | 43. 9 |
| 11. 9 | 22. 28 | 33. 8 | 44. 8 |

Problem Set

Summer Math Review Calendar