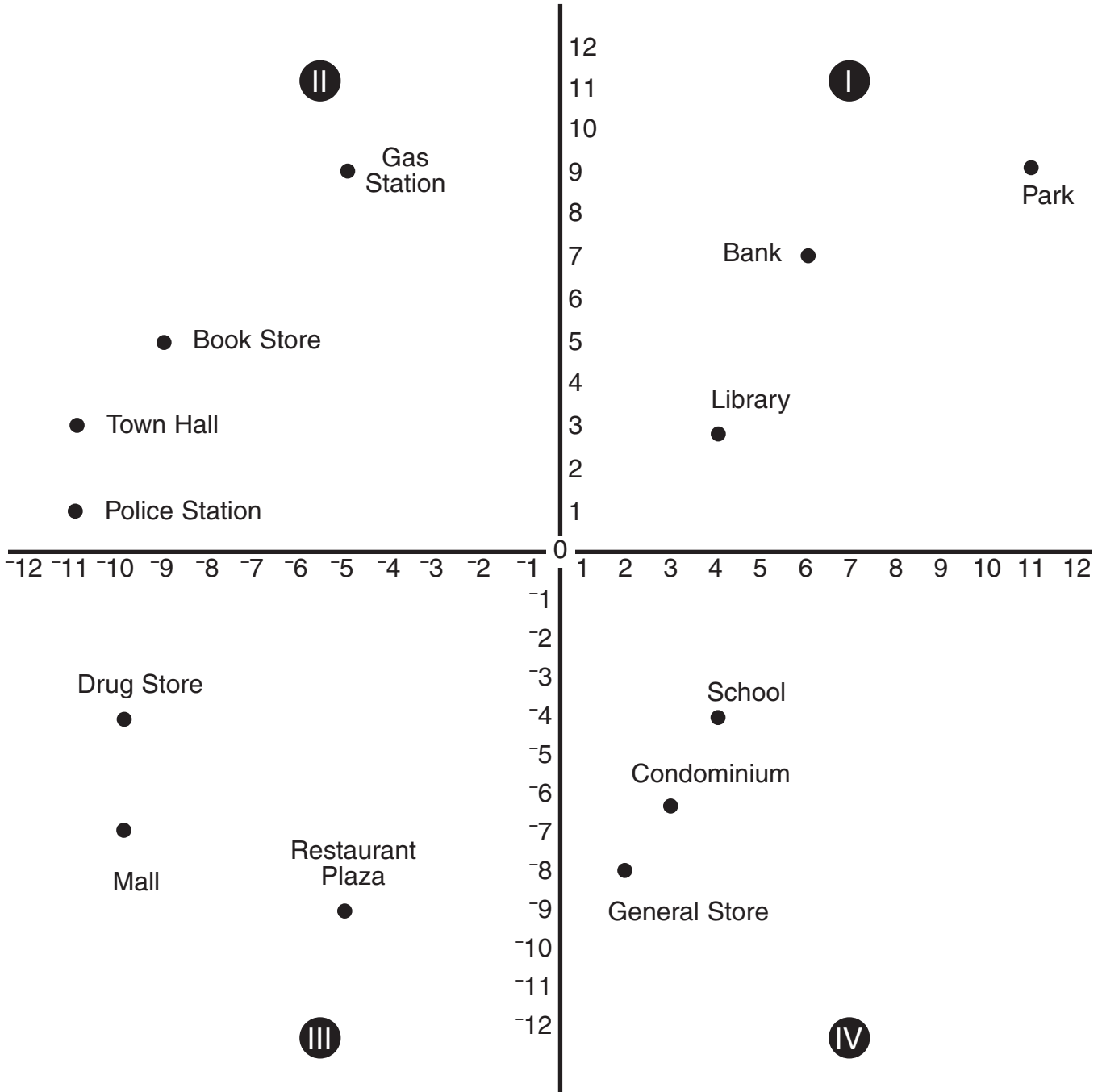


Practice 29



Practice 29 (cont.)



Directions

- Study the grid shown on page 32.
- Notice where landmarks such as the school and library are located.
- Notice which numbers are positive and which are negative.
- Note how the four quadrants are labeled: I, II, III, and IV.
- Remember: Always go across before going up or down.
- Use the information to answer these word problems.

1. What building is located at coordinates (4, 3)? _____
2. What city building is located at coordinates (-11, 3)? _____
3. Which business is located at (-5, 9)? _____
4. What are the coordinates of the police station? _____
5. What are the coordinates of the school? _____
6. What are the coordinates of the restaurant plaza? _____
7. What public area is located at coordinates (11, 9)? _____
8. What are the coordinates of the mall? _____
9. What are the coordinates of the book store? _____
10. What is located at coordinates (2, -8)? _____
11. What is located at coordinates (-10, -4)? _____
12. Which quadrant has all negative coordinates? _____
13. Which quadrant has only positive coordinates? _____
14. Which quadrant always begins with a negative number and concludes with a positive number?

Labeling Coordinates

Directions: Locate and label each of the coordinate pairs listed below. Draw a straight line connecting each point to the next.

A (-7, -10)

G (3, 6)

B (-5, -6)

H (3, -3)

C (-3, -2)

I (3, -9)

D (-1, 2)

J (3, -10)

E (1, 6)

K (-2, -10)

F (3, 10)

A (-7, -10)

Answer Key (cont.)

3. no
4. 5 m.p.h.
5. 20 m.p.h.
6. the scale doesn't go 0 to 70
7. start at 0/use a different scale
8. 1995
9. 1998
10. 10 thousand dollars
11. the scale is distorted, starts at 40
12. 25 thousand dollars
13. scale starts at 40 thousand dollars
14. starts at 0 and go to 70

Page 27

1. 920 feet
48,000 feet²
2. 288 feet
4,700 feet²
3. 360 feet
8,100 feet²
4. 600 feet
20,000 feet²
5. 320 yd.
6,000 yd.²
6. 260 feet
4,225 feet²
7. 346 m
7,300 m²
8. 350 yd.
7,150 yd.²

Page 28

1. 240 feet²
2. 450 feet²
3. 1,035 feet²
4. 240 feet²
5. 4,171 feet²
6. 1,155 feet²
7. 672 feet²
8. 87.5 feet²
9. 99.6 feet²
10. 484 feet²

Page 29

1. $C = \pi d$
 $C = 3.14 \times 9$
28.26 centimeters
2. $C = \pi d$
 $C = 3.14 \times 23$
72.22 centimeters
3. $C = 2\pi r$
 $C = 2 \times 3.14 \times 2$
12.56 centimeters

4. $C = \pi d$
 $C = 3.14 \times 2$
6.28 centimeters
5. $C = \pi d$
 $C = 3.14 \times 2.6$
8.164 centimeters
6. $C = 2\pi r$
 $C = 2 \times 3.14 \times 12$
75.36 inches
7. $C = 2\pi r$
 $C = 2 \times 3.14 \times 2$
12.56 inches
8. $C = 2\pi r$
 $C = 2 \times 3.14 \times 3$
18.84 centimeters

Page 30

1. $A = \pi r^2$
 $A = 3 \times 3 \times 3.14$
28.26 cm²
2. $A = \pi r^2$
 $A = 3.14 \times 8 \times 8$
200.96 inches²
3. $A = \pi r^2$
 $A = 3.14 \times 6 \times 6$
113.04 cm²
4. $A = \pi r^2$
 $A = 3.14 \times 7 \times 7$
153.86 millimeters²
5. $A = \pi r^2$
 $A = 3.14 \times 9 \times 9$
254.34 millimeters²
6. $A = \pi r^2$
 $A = 3.14 \times 2 \times 2$
12.56 feet²
7. $A = \pi r^2$
 $A = 3.14 \times 4 \times 4$
50.24 feet²
8. $A = \pi r^2$
 $A = 3.14 \times 4.5 \times 4.5$
63.585 cm²
9. $A = \pi r^2$
 $A = 3.14 \times 3.5 \times 3.5$
38.465 cm²
10. $A = \pi r^2$
 $A = 3.14 \times 1.15 \times 1.15$
4.15265 cm²

Page 31

1. 216 inches³
2. 27 cm³
3. 729 inches³
4. 8 inches³
5. 125 inches³

6. 900 cubic puzzles
7. 192 cubic magnifying glasses
8. 1,000 cm³ blocks
9. 120 games
10. 1,728 cubic puzzles

Page 33

1. library
2. town hall
3. gas station
4. (-11, 1)
5. (4, -4)
6. (-5, -9)
7. park
8. (-10, -7)
9. (-9, 5)
10. general store
11. drug store
12. III
13. I
14. II

Page 34

1. 3/10
2. 4/15
3. 9/50
4. 11/16
5. 1/2
6. 3/40
7. 2/3
8. 8/45
9. 2/5
10. 1/27

Page 35

1. $n = 35 - 12$
 $n = 23$
2. $23 + n = 41$
 $n = 18$
3. $n - 29 = 61$
 $n = 90$
4. $36 + n = 53$
 $n = 17$
5. $19 + n = 43$
 $n = 24$
6. $n/4 = 12$
 $n = 48$
7. $n \times 12 = 96$
 $n = 8$
8. $n/8 = 11$
 $n = 88$
9. $n \times 19 = 190$
 $n = 10$
10. $42/n = 6$
 $n = 7$

Page 36

1. 5:4 or 5/4
2. 4:5 or 4/5
3. 2:5 or 2/5
4. 5:2 or 5/2
5. 3:5 or 3/5
6. 5:3 or 5/3
7. 4:3 or 4/3

8. 3:4 or 3/4
9. 2:3 or 2/3
10. 3:2 or 3/2
11. 7:5 or 7/5
12. 5:7 or 5/7
13. 3:7 or 3/7
14. 7:3 or 7/3
15. 12:2 or 12/2 or 6:1 or 6/1
16. 2:12 or 2/12 or 1:6 or 1/6
17. 3:7 or 3/7
18. 7:3 or 7/3

Page 37

1. 1:4 :: 20:n
 $n = 80$ feet
2. 1:2 :: 25:n
 $n = 50$ feet
3. 3:15 :: 9:n
 $n = 45$ m
4. 4:1 :: 100:n
 $n = 25$ stories
5. 3:10 :: 33:n
 $n = 110$ yd.
6. 3:10 :: 15:n
 $n = 50$ m
7. 5:3 :: n:30
 $n = 50$ inches
8. 7:2 :: 42:n or 2:7 :: n:42
 $n = 12$ inches

Page 38

1. 528
9
59 (58.67)
2. 911
11
83 (82.8)
3. 1,160
13
89 (89.2)
4. 138
10
14 (13.8)
5. 63
12
5 (5.25)
6. 175
13
13 (13.46)
7. 109
16
7 (6.8)

Page 39

1. (46, 47, 48, 49, 50, 52, 52, 52, 53, 54,

- 56)
52
52
2. (47, 49, 55, 56, 57, 58, 59, 59, 59, 60, 60, 61, 63)
59
59
3. (57, 59, 59, 60, 61, 61, 63, 63, 65, 66)
59, 61, 63
61
4. (47, 49, 49, 49, 51, 52, 53, 54, 55, 57, 59)
49
52
5. (39, 40, 44, 44, 45, 48, 50, 55, 57, 57, 58, 60, 60, 61)
44, 57, 60
52.5

Page 40

1. C
2. D
3. B
4. A
5. A
6. C
7. B
8. D
9. B
10. D

Page 41

1. B
2. D
3. C
4. A
5. D
6. A
7. C
8. A
9. B
10. C

Page 42

1. A
2. B
3. C
4. B
5. D
6. B
7. D
8. C
9. A
10. D

Page 43

1. C
2. C
3. B
4. D
5. D
6. B
7. A
8. D
9. B
10. C

Page 44

1. C
2. C
3. A
4. B
5. D
6. A
7. C
8. B
9. D
10. C

Page 45

1. C
2. A
3. B
6. C
7. A
8. B

What's the Plot?

5.7

Name _____

Date _____

Directions: Each of these sets of coordinates will give you a shape. Plot the points carefully, join them up in the order they are given and then name the shape.

1. $(2, 1), (4, 1), (5, 3), (4, 5), (2, 5), (1, 3)$

shape _____

4. $(-7, -6), (-3, -6), (-4, -9), (-8, -9)$

shape _____

2. $(5, 2), (0, 9), (-5, 2)$

shape _____

5. $(4, -5), (4, -2), (-1, -3), (-1, -8)$

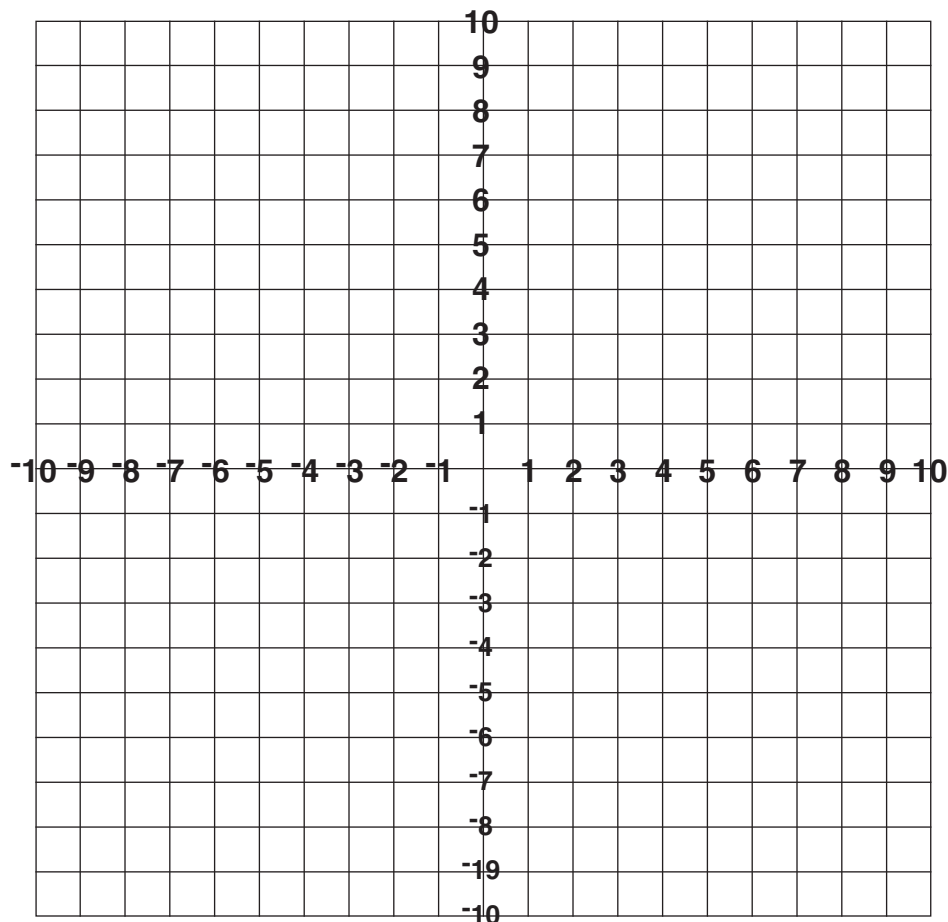
shape _____

3. $(-5, 1), (-8, -2), (-7, -5), (-3, -5), (-2, -2)$

shape _____

6. $(7, -8), (9, -5), (7, -2), (5, -5)$

shape _____



It Was on the Line

5.9

Name _____

Date _____

Directions: Each set of coordinates given creates a familiar shape when joined together. You must plot the coordinates and then find the reflection of the shape on the axis given. Read each set of coordinates carefully.

1. **Shape a** (2, 8), (5, 8), (7, 10), (4, 10)

Plot a and reflect it on the y -axis.

2. **Shape b** (3, 1), (3, 3), (8, 3), (8, 1)

Plot b and reflect it on the x -axis.

3. **Shape c** (-2, 1), (-1, 1), (-1, 6), (-2, 6)

Plot c and reflect it on the y -axis.

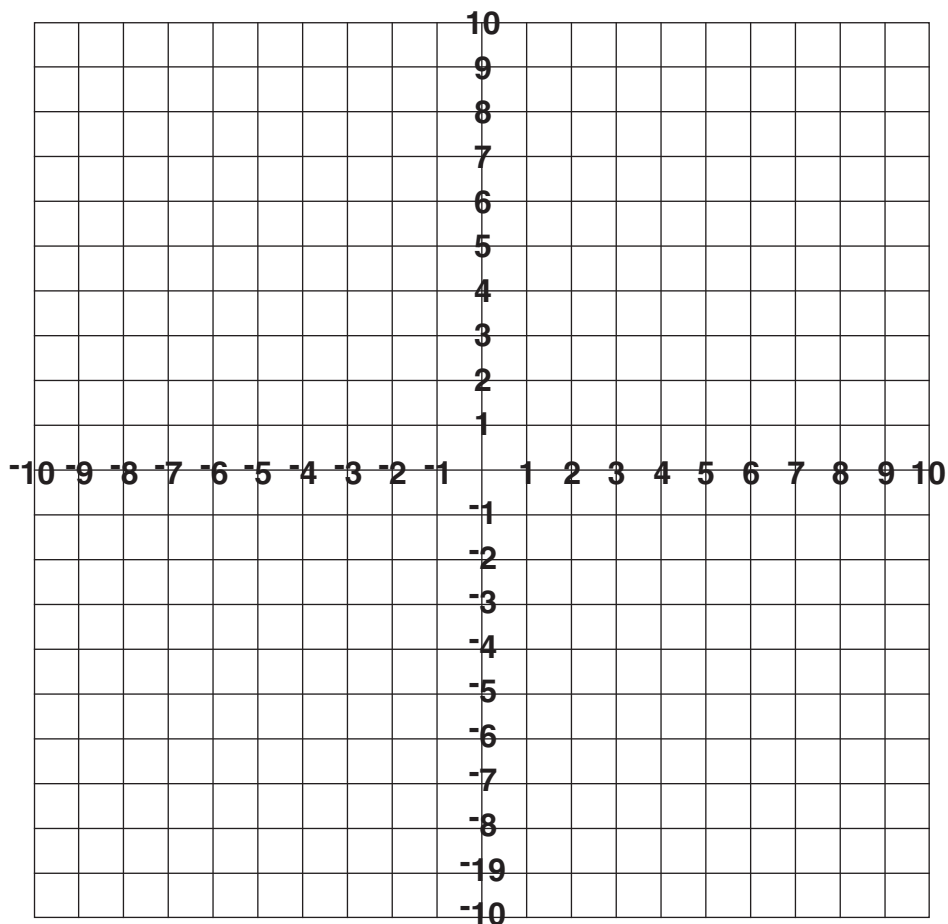
Plot c and then reflect it on the x -axis.

4. **Shape d** (-8, -3), (-8, -6), (-4, -5), (-4, -3)

Plot d and reflect it on the x -axis.

5. **Shape e** (8, -6), (10, -9), (6, -9)

Plot e and reflect it on the x -axis.



Pages 19 and 20

Name	Number of Vertices	Feature
triangle	3	There are six different sorts
circle	0	It has one edge
rhombus	4	It has four sides of equal length
pentagon	5	A five sided shape
octagon	8	An eight sided, closed shape
rectangle	4	It has four right angles
parallelogram	4	Opposite sides are equal and parallel

Name	Number of Faces	Shape of Faces	Number of Vertices
tetrahedron	4	triangle	4
cube	6	square	8
triangular prism	5	triangle rectangle	6
cylinder	3	rectangle circle	0
dodecahedron	12	regular pentagon	20
cuboid	6	rectangle	8
icosahedron	20	triangle	12

Page 29

Definition for each quadrilateral could include something from the following:
 A square has four sides. All corners are right angles and all sides are equal.
 The diagonals cross at right angles at the center of the square.

A rectangle has four sides. All the four corners are right angles. Opposite sides are equal in length. It has two pairs of parallel sides.

Page 47

1. right triangle, isosceles
2. isosceles acute triangle
3. equilateral acute triangle
4. scalene obtuse triangle
5. isosceles acute triangle
6. scalene obtuse triangle
7. right isosceles triangle
8. right triangle, isosceles

Page 59

1. hexagon
2. isosceles triangle
3. pentagon
4. parallelogram
5. quadrilateral/trapezoid
6. rhombus

Page 60

1. (1, -8)
2. (-7, 2)
3. (-1, -2)
4. (0, -10)
5. (9, -6)
6. (9, -6)
 dodecagon
 eratosthenes

Page 73

1. Shape a = parallelogram
2. Shape b = rectangle
3. Shape c = rectangle
4. Shape d = trapezoid/quadrilateral
5. Shape e = isosceles triangle

Page 79

1. (5, 6); parallel sides: (-2, 6) (-2, 9) and (5, 6) (5, 9); (-2, 9) (5, 9) and (5, 6) (5, 9).
2. (-4, -1); parallel sides: (-8, -1) (-4, -1) and (-10, -5) (-6, -5); (-10, -5) (-8, -1) and (-6, -5) (-4, -1).
3. (10, 5); parallel sides: (8, 1) (10, 5) and (6, 5) (8, 7); (8, 7) (10, 5) and (6, 5) (8, 1).
4. (-10, 6); parallel sides: (-5, 6) (-3, 8) and (-10, 6) (-8, 8); (-8, 8) (-3, 8) and (-10, 6) (-5, 6).
5. (-1, -5); parallel side: (-7, -3) (-2, -3) and (-8, -5) (-1, -5).