



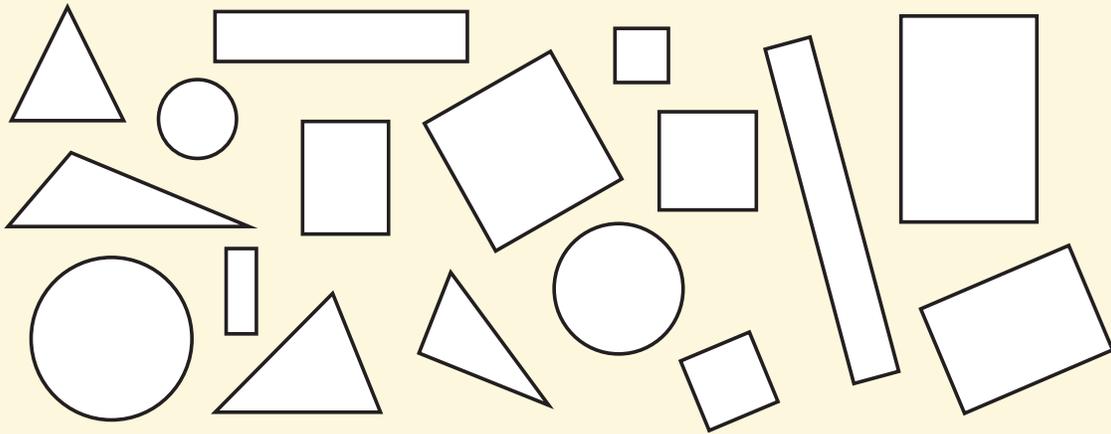
# Recognize and Draw Shapes



## Use What You Know

Find circles, triangles, squares, and rectangles.

Macy makes this collage with cutout shapes. How many circles, triangles, squares, and rectangles does she use?



Color the shapes as described below.  
Then write how many there are of each shape.

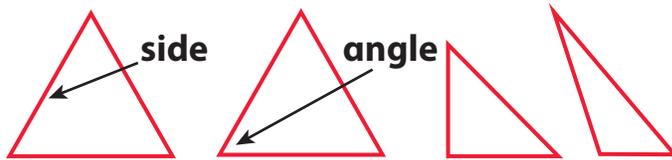
- a.** Color the circles red. \_\_\_\_\_ circles
- b.** Color the triangles blue. \_\_\_\_\_ triangles
- c.** Color the squares yellow. \_\_\_\_\_ squares
- d.** Color the rectangles green. \_\_\_\_\_ rectangles



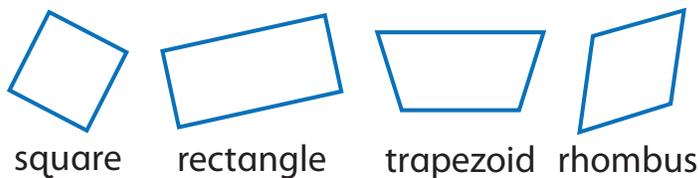
## Find Out More

Most shapes have sides and angles.

**Triangles** have 3 sides and 3 angles.



**Quadrilaterals** have 4 sides and 4 angles.



**Pentagons** have 5 sides and 5 angles.

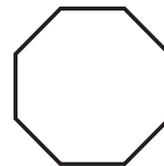


**Hexagons** have 6 sides and 6 angles.



**Reflect** Work with a partner.

- 1 Talk About It** Look at the hexagons above. Can the shape at the right be called a hexagon? Explain.



**Write About It** \_\_\_\_\_

\_\_\_\_\_

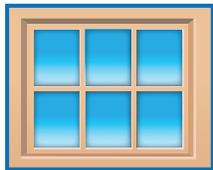
\_\_\_\_\_

**Learn About**  **Naming and Drawing Shapes**

**Read the problem. Then you will explore sides and angles of shapes.**

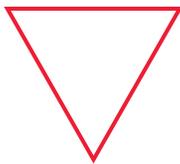
Some friends hunt for shapes around school. Then they draw pictures of the objects they see. What are the names of the shapes that they draw?

**Picture It** You can look for shapes.



**Draw It** You can draw the shapes.

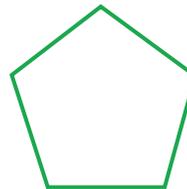
Shape A



Shape B



Shape C



▶ **Connect It** Use the number of sides and angles to name shapes.

2 Look at *Draw It* to complete the chart below.

Shape	Shape Name	Number of Sides	Number of Angles
A			
B			
C			

3 What do you notice about the number of sides and the number of angles in each shape?

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4 What is another name for Shape B? Explain.

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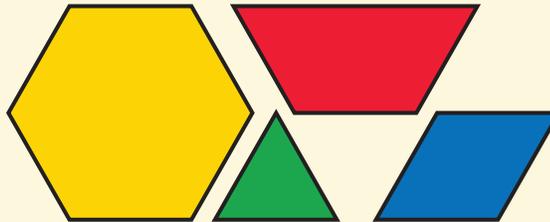
▶ **Try It** Try another problem.

5 Draw 3 shapes. One has 3 angles. One has 4 angles. One has 5 sides. Make the shapes different from those in *Draw It*.

**Learn About**  **Making Shapes**

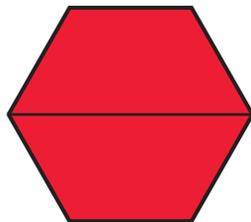
**Read the problem. Then explore different ways to make a hexagon.**

Meg has these shapes.  
How can she put them together to make a hexagon?



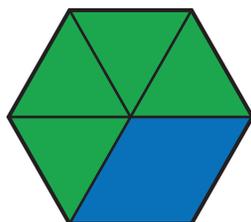
**▶ Model It** You can make the hexagon with the same shapes.

Both parts of the hexagon are the same shape.



**▶ Model It** You can make the hexagon with different shapes.

Some parts are the same shape but some are different.



▶ **Connect It** Name shapes that make a hexagon.

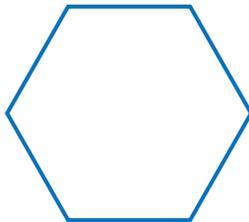
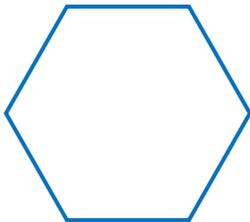
6 Look at the first *Model It*. What shapes make up the hexagon? How many of each shape?

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7 Look at the second *Model It*. What shapes make up the hexagon? How many of each shape?

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8 Find two new ways to make a hexagon. Use the shapes at the top of the previous page. Make a drawing to show each way. Then write how many of each shape make up each hexagon.

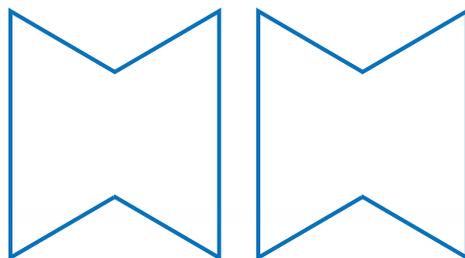


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▶ **Try It** Try another problem.

9 Show how to make this shape two different ways. Use the shapes shown at the top of the previous page.



**Practice**

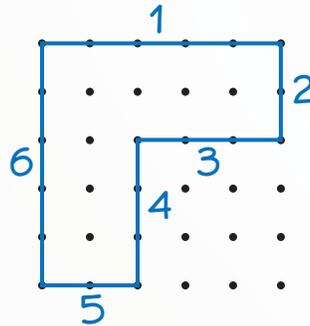
# Recognizing and Drawing Shapes

Study the model below. Then solve Problems 10–12.

**Example**

Lin drew a hexagon that is different from the ones on the previous page. What could her shape look like? Make a drawing.

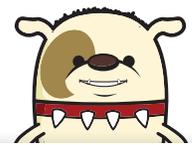
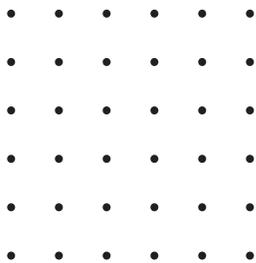
**You can use dot paper to show your work.**



**Answer** This shape has 6 sides. It is a hexagon.

- 10** Draw a shape that has 5 sides. Write the name of the shape.

**Show your work.**



You can use the dots as the corners of your shape.

**Answer** \_\_\_\_\_

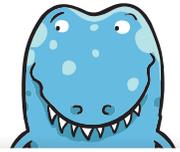
**11** Solve the riddle.

I have fewer sides than a pentagon.

I am not a quadrilateral.

What am I?

**Show your work.**



What shapes have fewer sides than a pentagon?

**Answer** \_\_\_\_\_

**12** Which statement is true?

**A** Rectangles are not quadrilaterals.

**B** Quadrilaterals can have 5 angles.

**C** All quadrilaterals have 4 sides.

**D** All quadrilaterals have 4 equal sides.

Alma chose **D** as the answer. This answer is wrong.

How did Alma get her answer?



Make a picture of all the different quadrilaterals you know.

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**Practice**  **Recognizing and Drawing Shapes****Solve the problems.**

- 1** Fill in the blanks. Use the words in the box.
- a. \_\_\_\_\_ triangles have 3 sides.
- b. \_\_\_\_\_ triangles have sides the same length.
- c. \_\_\_\_\_ triangles have 4 angles.

Some

No

All

- 2** Ross draws a shape with 6 angles. What is true about his shape? Circle all the correct answers.

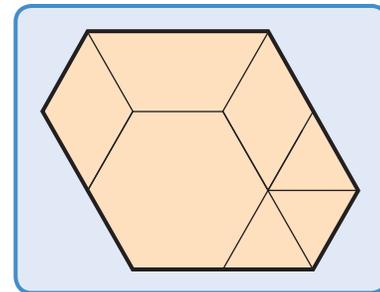
- A** It is a pentagon.
- B** It has 6 sides.
- C** It has 5 sides.
- D** It is a hexagon.

- 3** What is true about the shape below?  
Circle all the correct answers.



- A** It is a pentagon.
- B** It is a quadrilateral.
- C** It can be made up of 2 trapezoids.
- D** It has 3 angles.

**Use the shape in the box for Problems 4 and 5.**



**4** What is the name of the big shape that is made by putting all the small shapes together? How do you know?

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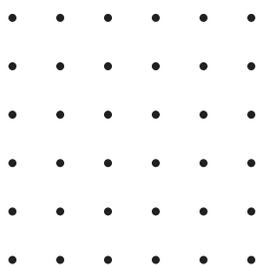
**5** There are 7 smaller shapes that make up the big shape. How many are there of each smaller shape?

\_\_\_\_\_ triangles

\_\_\_\_\_ quadrilaterals

\_\_\_\_\_ hexagon

**6** Draw a shape that has between 3 and 6 sides. Use the dots below. What is the name of your shape? Explain how you know.



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**✓ Self Check** Now you can count sides and angles. Fill this in on the progress chart on page 259.