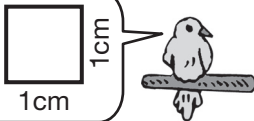# Area and Perimeter Practice
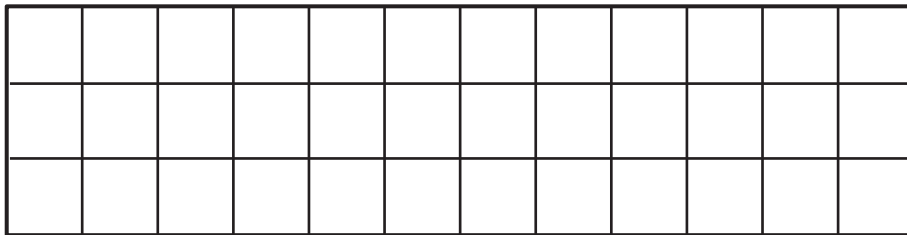
Finding Area and Perimeter

1. Find the area and perimeter of each shape. Write a number sentence to show how you found each perimeter.

> The grid squares in these shapes have an area of 1 square centimeter.
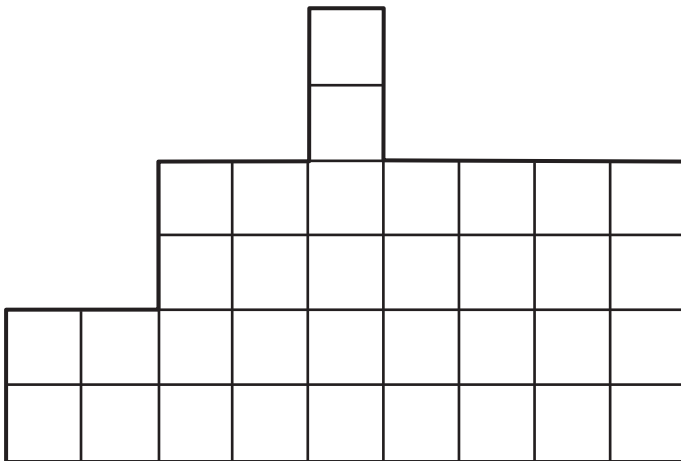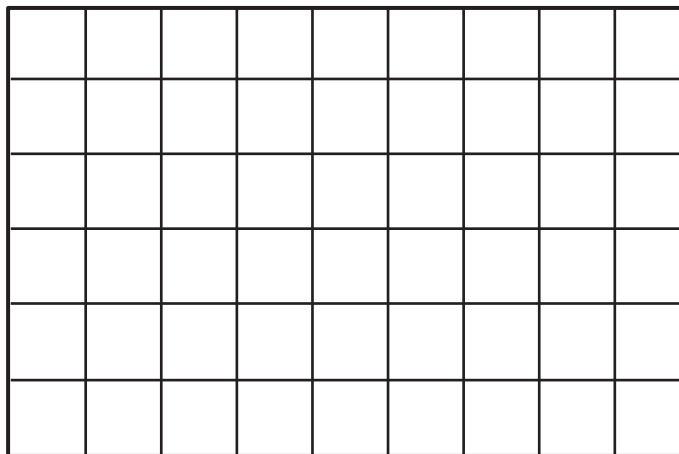> 1cm
> 1cm

▲●□ **A.**

Area: _____   Perimeter: _____

▲●□ **B.**

Area: _____

Perimeter:

_____

▲●□ **C.**

Area: _____   Perimeter: _____

▲● **D.**

Area: _____

Perimeter:

_____

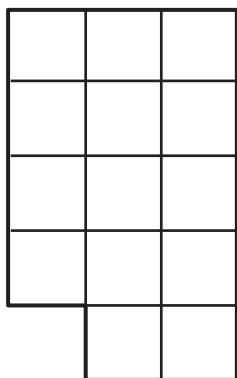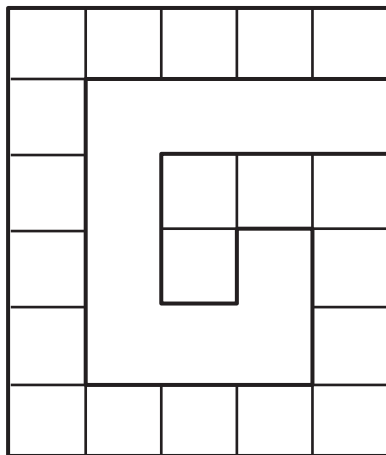**●** **E.**

Area: _____
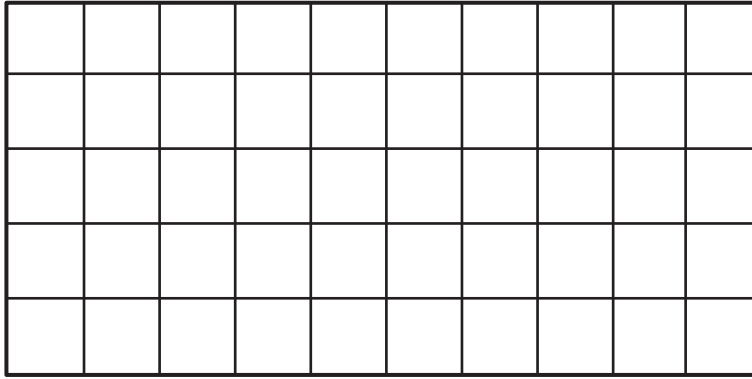
Perimeter:

_____

■ **F.**

Area: _____

Perimeter:

_____

G.

Area: _____   Perimeter: _____

H.   A Large rectangle is 25 cm long and 10 cm wide.

Area: _____   Perimeter: _____

2.   Compare the shapes in Question 1A–D.

A. How are the shapes the same? _____

_____

B. How are the shapes different? _____

_____

✓ Check-In: Question 3

▲●■ **3.** Draw two more shapes that have a perimeter of 30 cm in the square-centimeter grid below. Find the area of each shape.

Reasoning About Area and Perimeter

▲●▣ **4.** Use square-inch tiles to make a shape that fits on the grid and matches the clues in each riddle. Put the tiles together edge to edge. Draw the shape on the grid. Compare your shape to the clues.

edge to edge

not edge to edge

not edge to edge
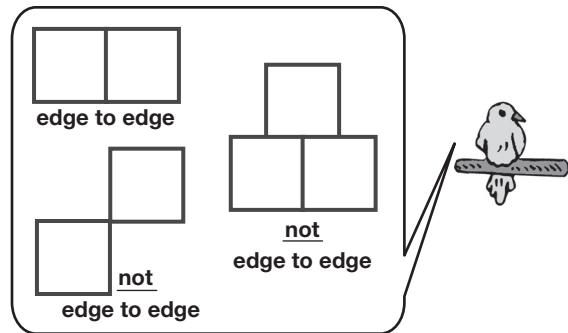
A. Clue 1: My area is 12 sq. in.

Clue 2: My perimeter is 18 in.

Clue 3: I am not a rectangle.

B. Clue 1: My area is 12 sq. in.

Clue 2: I am a rectangle.

Clue 3: My perimeter is 14 in.
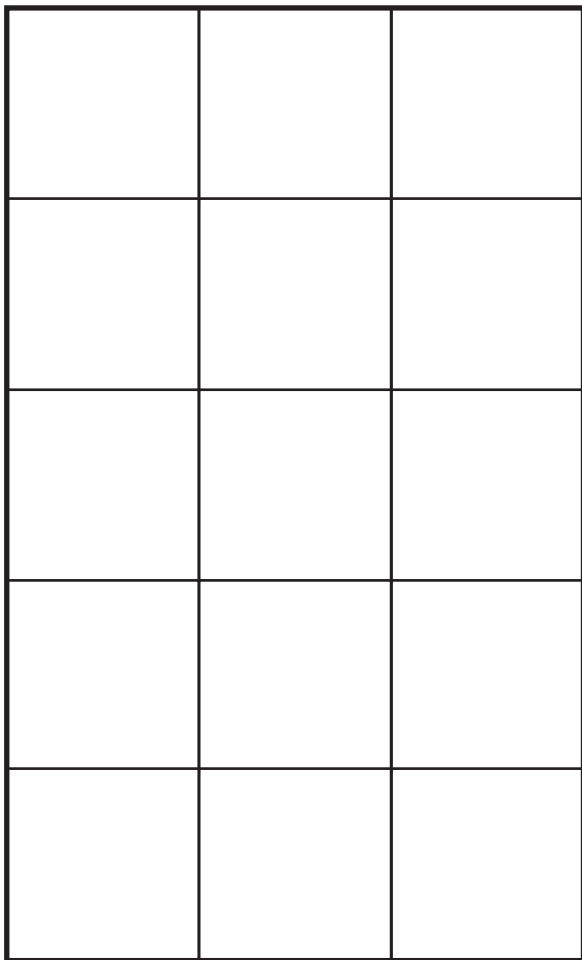
Area: _____ Perimeter: _____

Area: _____ Perimeter: _____

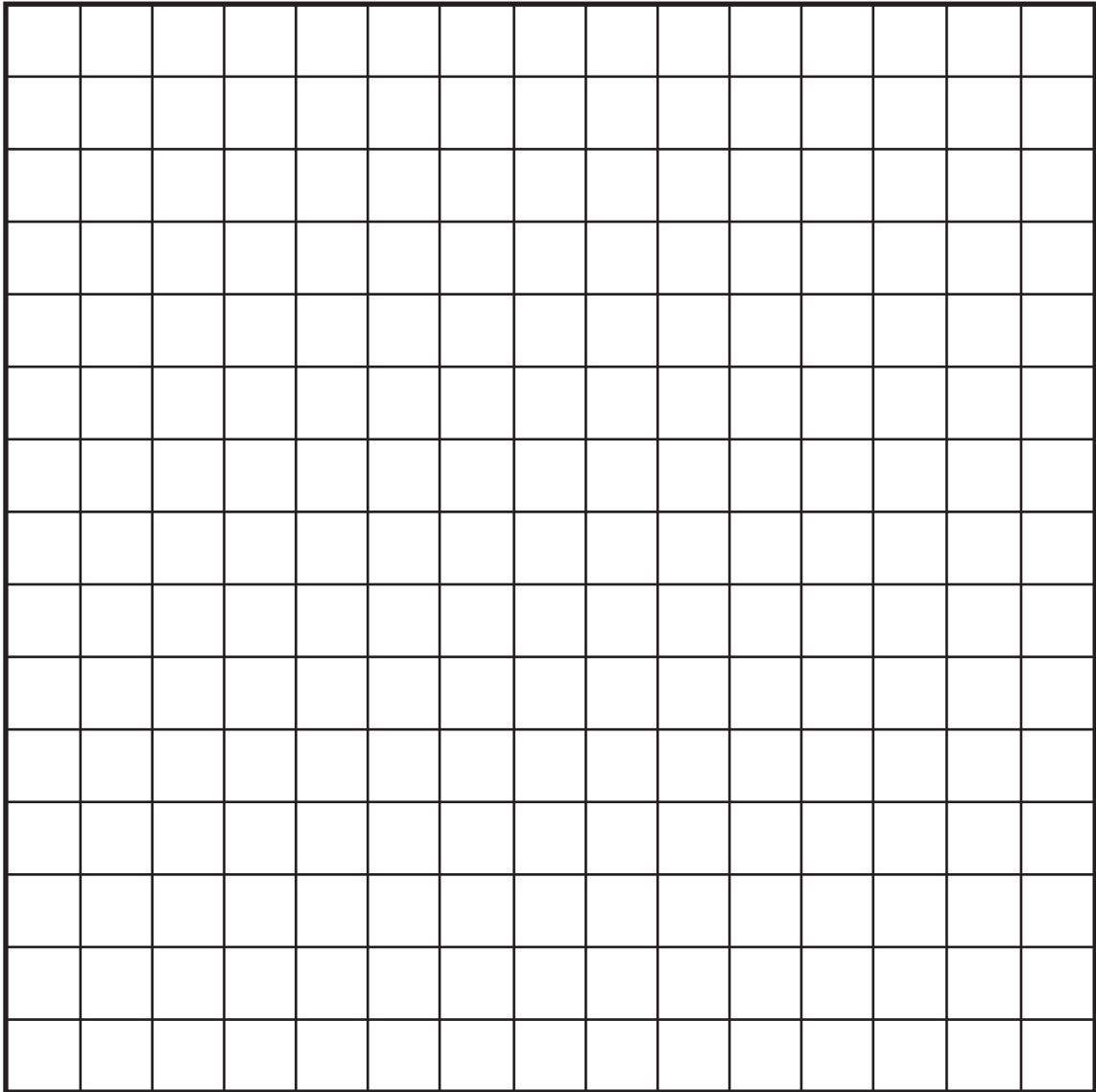**C.** Clue 1: I am a rectangle.
Clue 2: My area is 12 sq. in.
Clue 3: My perimeter is 16 in.

D. Clue 1: I am not a rectangle.
Clue 2: My area is 12 sq. in.
Clue 3: My perimeter is 16 in.

Area: _____   Perimeter: _____

Area: _____   Perimeter: _____

Name _____   Date _____

5. • Make a riddle by filling in a number in Clue 3.
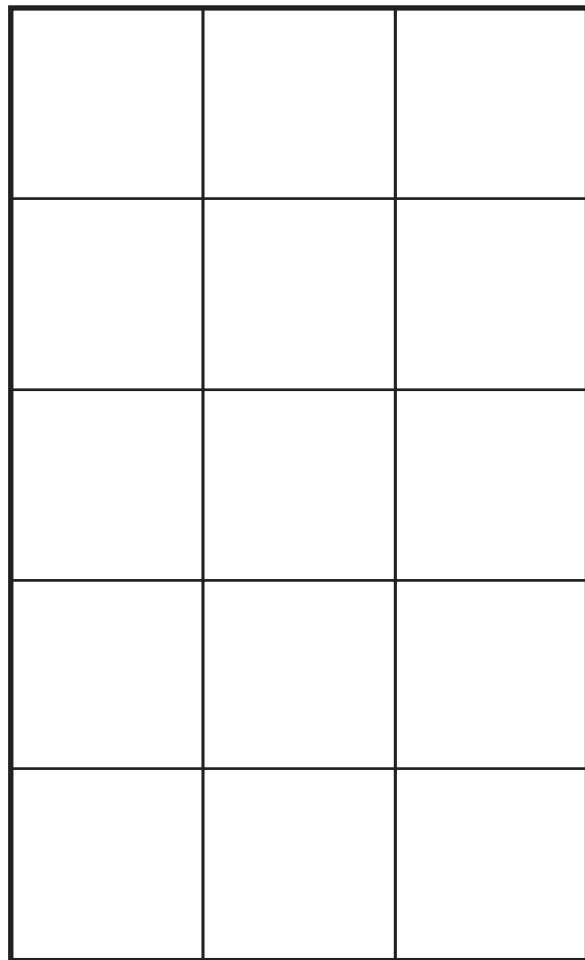   • Check to make sure there is a shape that matches all the clues for
     your riddle.
   • Trade riddles with a partner.
   • Solve your partner's riddle and draw the matching shape on your
     partner's paper.

Clue 1: I am not a rectangle.

Clue 2: My area is 12 square inches.

Clue 3: My perimeter is _____ inches.

Area: _____   Perimeter: _____

Solved by: _____

✓ Check-In: Questions 6–7

▲|●|■ **6.** Grace used six square-inch tiles to make the shape shown below. Find the area and perimeter of the shape.
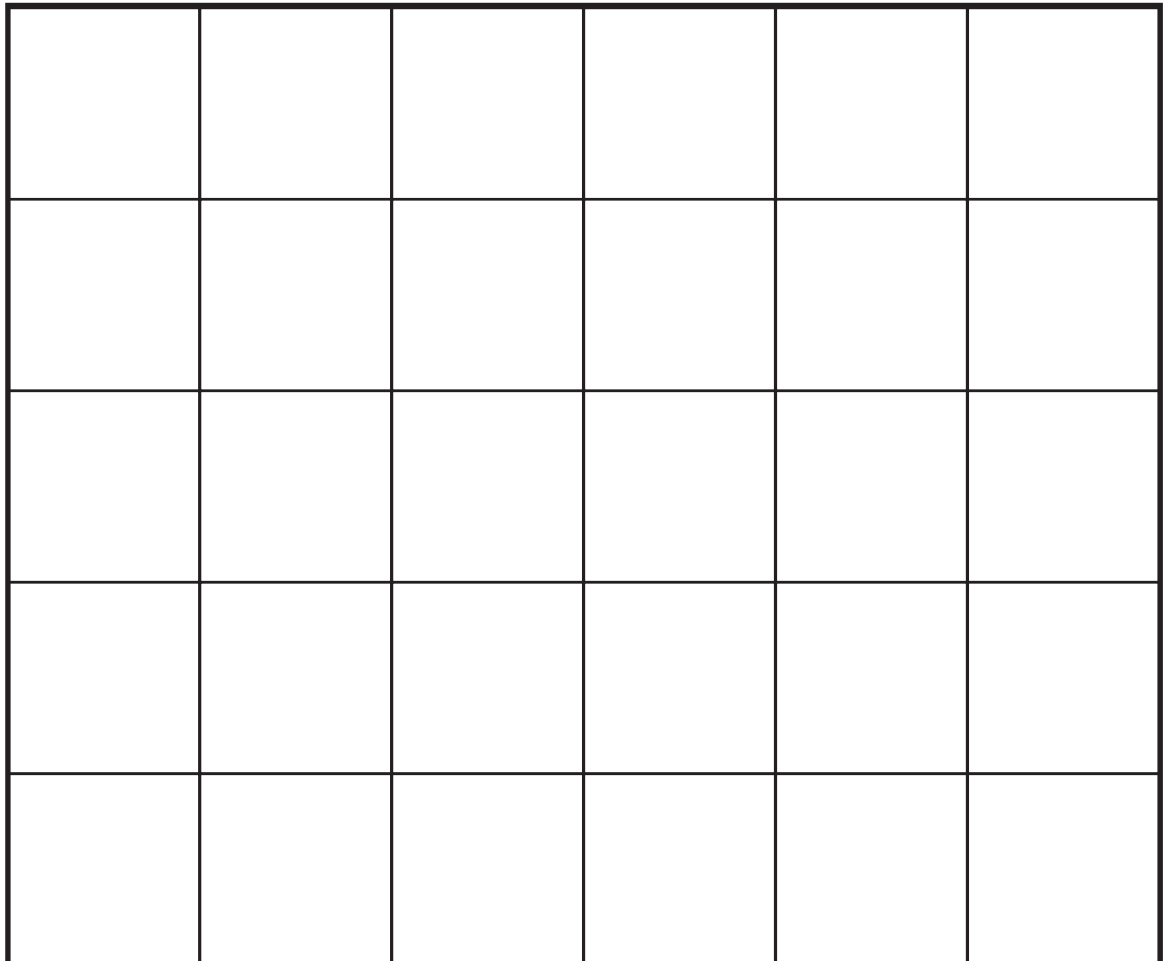
A.

Area:

_____

Perimeter:

_____

B. In the grid below, draw two more shapes with the same area as Grace's shape—one with a *larger* perimeter and one with a *smaller* perimeter. Write the area and perimeter next to each shape.
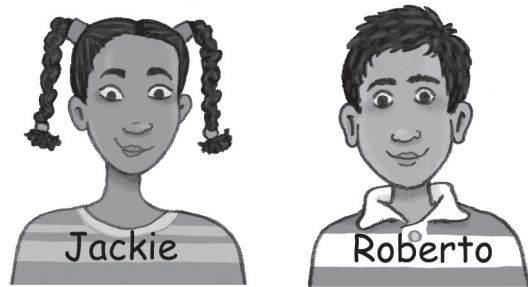
C. How are the three shapes from Parts A and B the same?

D. How are the three shapes different?

[▲●■] **7.** Jackie made a rectangle with 8 tiles. "My rectangle has a perimeter of 18 inches," said Jackie.

"That can't be right!" said Roberto. "I made a shape with 8 tiles too, but my perimeter is only 12 inches."

What would you say to Roberto?

Jackie   Roberto

■▢▢ **8.** Using five square-inch tiles, how many shapes can you find that each have different perimeters? Sketch each shape below. Write the area and perimeter next to each shape you draw.

9. Roberto has 24 square-centimeter tiles. He started to make a table to find the rectangle with the smallest perimeter. Complete Roberto's table. Draw a sketch of the rectangle with the smallest perimeter.

edge to edge
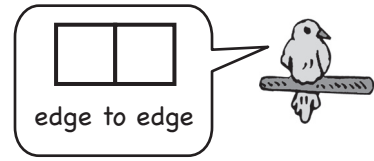
Length cm	Width cm	Perimeter cm
24	1	50
12	2	28
8	3	
6	4	
4	6	
3	8	
2	12	
1	24	

10. Keenya has a 24-centimeter piece of wire. She needs to bend it to make different rectangles. She started a table to find the rectangle with the smallest area. Complete Keenya's table. Draw a sketch of the rectangle with the smallest area.

Length cm	Width cm	Perimeter cm	Area cm
6	6	24	36
5	7	24	35
4	8		
3	9		
2			
1			

■■■**11.** How many different shapes can you find that have a perimeter of 12 inches, but each has a different area? Sketch each shape below. Write the area and perimeter next to each shape you draw.

Area and Perimeter Practice Check-In: Q# 3, 6–7 Feedback Box	Expectation	Check In	Comments
Recognize and generalize geometric relationships in problems involving the area and perimeter of rectangles. [Q# 6 and 7]	E4		
Find the perimeter of rectangles and irregular shapes by counting units and adding. [Q# 3 and 6]	E6		
Find the area of rectangles and irregular shapes by counting, adding, or multiplying. [Q# 6]	E7		