

# Break-Apart Products



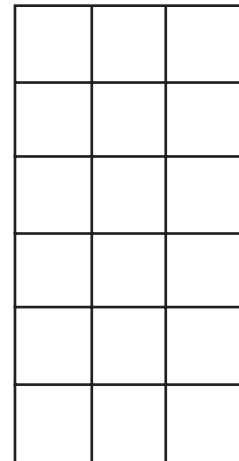
- 1. A.** How many rows does the rectangle to the right have?

Rows: \_\_\_\_\_

- B.** How many squares are in each row?

Squares: \_\_\_\_\_

- C.** Write a number sentence on the rectangle for the total number of squares.



- 2.** The rectangle to the right has been divided in half.

- A.** Color the top half red and write a number sentence on the top half for the total number of small red squares.

How many rows are red? \_\_\_\_\_

- B.** Color the bottom half yellow. Write a number sentence on the bottom half for the total number of small yellow squares.

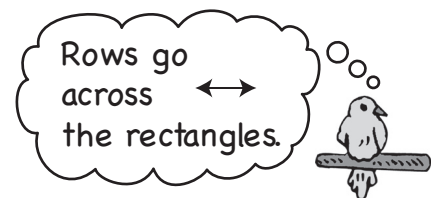
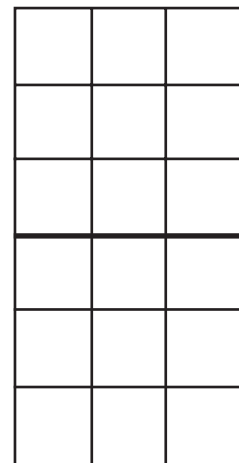
How many rows are yellow? \_\_\_\_\_

- C.** Complete these number sentences using the rectangle for Question 2:

$$6 \times 3 = 3 \times 3 + 3 \times 3$$

$$6 \times 3 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$$

$$6 \times 3 = \underline{\hspace{2cm}}$$



- 3. A.** Color the first 5 rows of the rectangle on the right red. Write a number sentence on the red rectangle for the total number of red squares.
- B.** Color the last row yellow. Write a number sentence on the yellow rectangle for the total number of yellow squares.


- C.** Complete the number sentences below to match the rectangle:

$6 \times 3 = \underline{\hspace{2cm}} \times 3 + \underline{\hspace{2cm}} \times 3$

$6 \times 3 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

$6 \times 3 = \underline{\hspace{2cm}}$

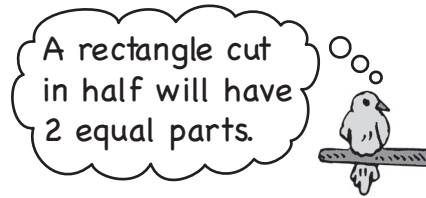
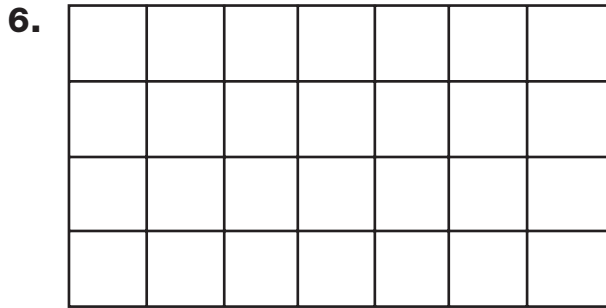
- 4.** How are the rectangles in Questions 2 and 3 alike?  
How are they different?



## Explore

**5.**


- A.** How many squares are in the rectangle above? \_\_\_\_\_
- B.** Write a number sentence on the rectangle for the total number of squares.



- A.** Color the top half of the rectangle above red. Write a number sentence on the top half for the total number of red squares.
  
- B.** Color the bottom half of the rectangle above yellow. Write a number sentence on the bottom half for the total number of yellow squares.
  
- C.** Complete the following number sentences to match the rectangles.

$$4 \times 7 = \underline{\hspace{2cm}} \times 7 + \underline{\hspace{2cm}} \times 7$$

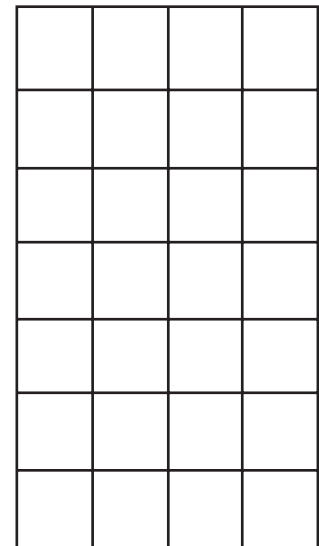
$$4 \times 7 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$$

$$4 \times 7 = \underline{\hspace{2cm}}$$

- 7. A.** How many squares are in the rectangle to the right?

\_\_\_\_\_

- B.** Write a number sentence on the rectangle for the total number of squares.



**8. A.** Color the top 5 rows of the rectangle to the right red. Write a number sentence on the red rectangle for the total number of red squares.

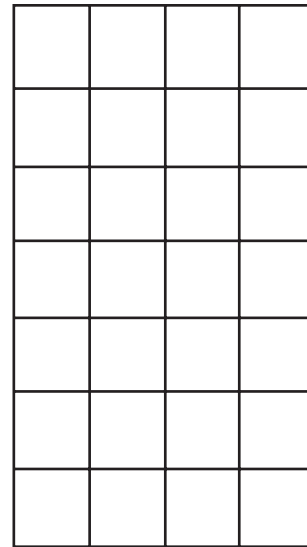
**B.** Color the bottom half of the rectangle yellow. Write a number sentence on the bottom half for the total number of yellow squares.

**C.** Complete the following number sentences to match the rectangles.

$$7 \times 4 = \underline{\hspace{2cm}} \times 4 + \underline{\hspace{2cm}} \times 4$$

$$7 \times 4 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$$

$$7 \times 4 = \underline{\hspace{2cm}}$$

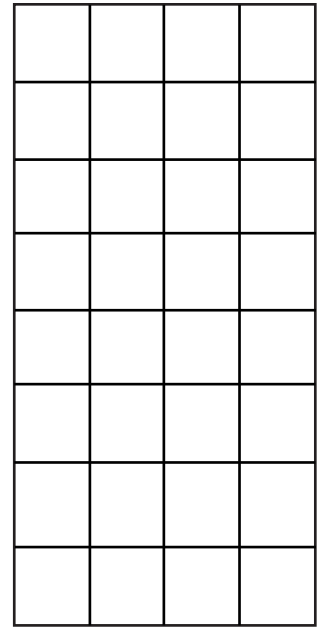


**9. A.** How are the rectangles in Questions 5, 6, 7, and 8 alike?

**B.** How are the rectangles in Questions 5, 6, 7, and 8 different?

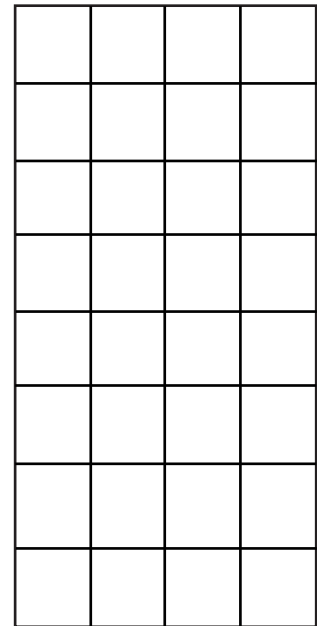
**10. A.** Divide the rectangle to the right into two smaller rectangles. Choose a way that will make it easy for you to find the product of  $8 \times 4$ .

**B.** Write number sentences that match your rectangles.



**11. A.** Divide the rectangle to the right into two smaller rectangles. Choose a different way from the one in Question 10.

**B.** Write number sentences that match your rectangles.



- 12. A.** How are your rectangles in Questions 10 and 11 alike?
  
- B.** How are your rectangles in Questions 10 and 11 different?
  
- C.** Think about the ways that you divided the rectangle. Which way made it easier for you to find the product of  $8 \times 4$ ? Why?

 **Check-In: Question 13**

- 13. A.** Divide the rectangle to the right into two smaller rectangles that will help you find the total number of squares.
  
- B.** Write number sentences that match your rectangles.
  
- C.** Use a different strategy to check your work. Show or tell what you did.
