

Name: \_\_\_\_\_

## Multiplication with Arrays

When you multiply, think of the multiplication symbol as having the meaning "rows of."

The fact  $3 \times 6$  would actually mean "3 rows of 6"

To solve this fact, draw 3 rows of 6 symbols.

$\begin{array}{cccccc} x & x & x & x & x & x \\ x & x & x & x & x & x \\ x & x & x & x & x & x \end{array}$       3 rows of 6 symbols equals 18 symbols.  
 $3 \times 6 = 18$

Symbols arranged in neat rows and columns are called arrays.

Look at each array. Count the symbols in each row and column carefully. Write the multiplication fact for each.

1.  $\begin{array}{cccccccc} \circ & \circ & \circ & \circ & \circ & \circ & \circ & \circ \\ \circ & \circ & \circ & \circ & \circ & \circ & \circ & \circ \\ \circ & \circ & \circ & \circ & \circ & \circ & \circ & \circ \\ \circ & \circ & \circ & \circ & \circ & \circ & \circ & \circ \end{array}$       \_\_\_\_\_ rows of \_\_\_\_\_ equals \_\_\_\_\_  
\_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

2.  $\begin{array}{cccccccc} | & | & | & | & | & | & | & | \\ | & | & | & | & | & | & | & | \\ | & | & | & | & | & | & | & | \\ | & | & | & | & | & | & | & | \end{array}$       \_\_\_\_\_ rows of \_\_\_\_\_ equals \_\_\_\_\_  
\_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

3.  $\begin{array}{cccc} \blacklozenge & \blacklozenge & \blacklozenge & \blacklozenge \\ \blacklozenge & \blacklozenge & \blacklozenge & \blacklozenge \\ \blacklozenge & \blacklozenge & \blacklozenge & \blacklozenge \\ \blacklozenge & \blacklozenge & \blacklozenge & \blacklozenge \end{array}$       \_\_\_\_\_ rows of \_\_\_\_\_ equals \_\_\_\_\_  
\_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

**Now try this:** On the back of this paper, draw an array for each of these facts:  
 $7 \times 4$        $8 \times 3$        $9 \times 6$        $3 \times 7$        $8 \times 5$