

# RECALL

Use  $<$ ,  $>$  or  $=$  to make the statements correct.

$$3 \times 2 \quad \bigcirc \quad 3 + 3 + 3$$

$$4 + 4 + 4 \quad \bigcirc \quad 4 \times 3$$

$$5 \times 5 = \quad \bigcirc \quad 5 + 5 + 5 + 5$$



# TO USE ARRAYS TO SOLVE MULTIPLICATION CALCULATIONS

Date Learning ladder ref



# MULTIPLICATION AND DIVISION

*SWE* create different arrays with the same total amount.

*SW* draw arrays to represent number sentences.

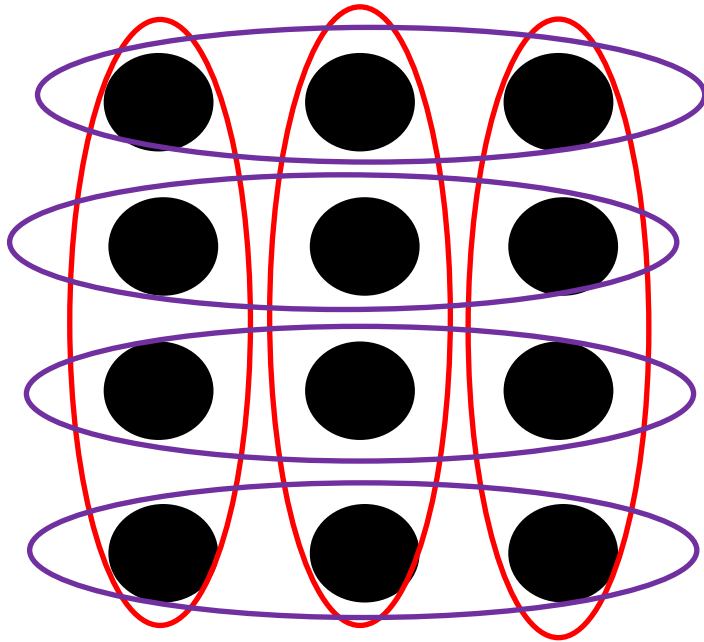
*MW* describe arrays with number sentences.

*AW* circle groups in arrays to show multiplication facts.

13.01.21



# GUIDED PRACTICE



This is called an array.

It shows  $3 \times 4$  and  $4 \times 3$ . Or, 3 lots of 4 or 4 lots of 3.

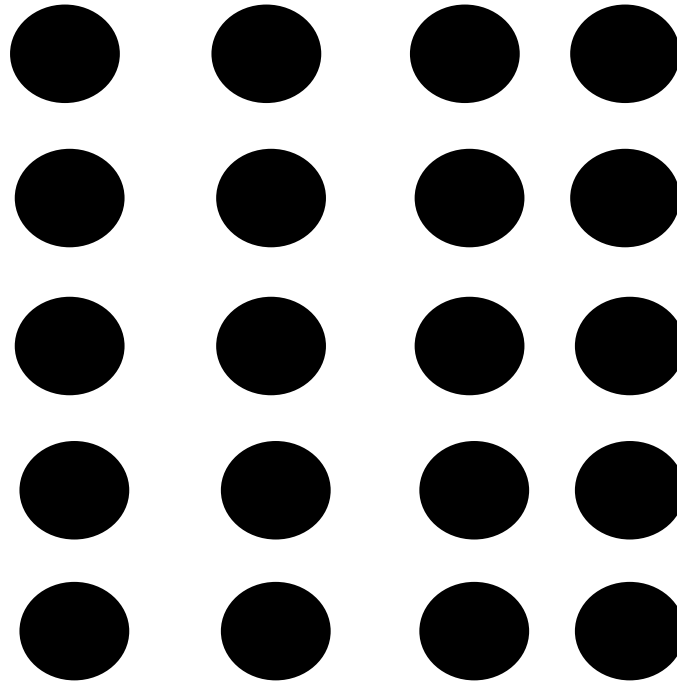
$3 \times 4$  is in red.

$4 \times 3$  is in purple.



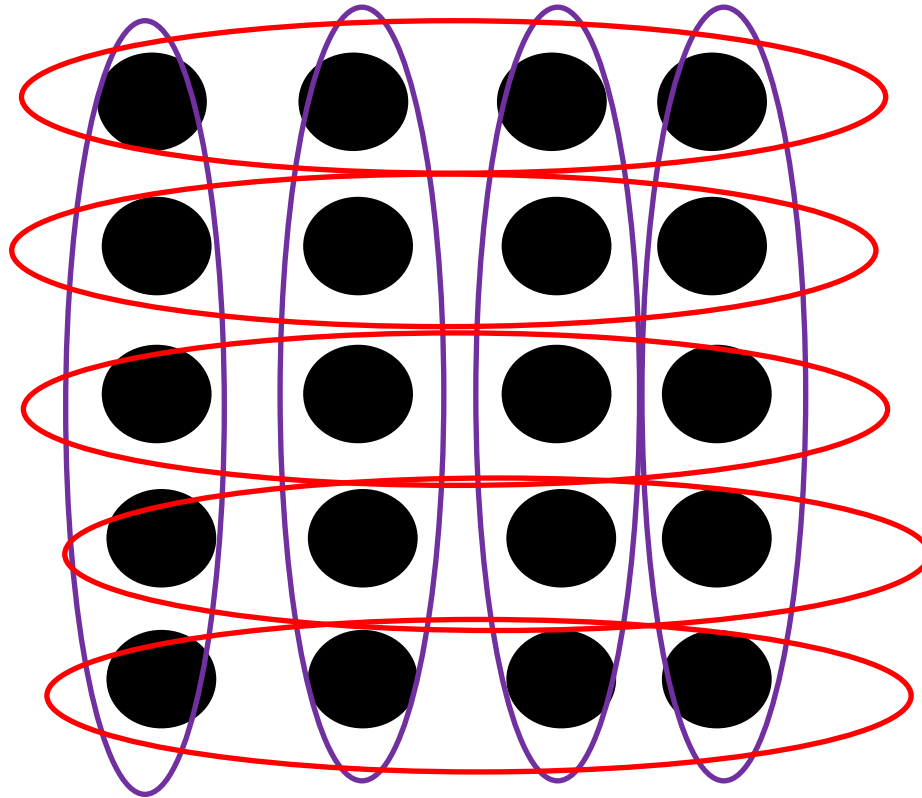
# GUIDED PRACTICE

What calculations does this array represent?



# GUIDED PRACTICE

What calculations does this array represent?



$$4 \times 5 = 20$$

$$5 \times 4 = 20$$

$$4 \text{ lots of } 5 = 20$$

$$5 \text{ lots of } 4 = 20$$



# INTELLIGENT PRACTICE



On the image, find  $2 \times 5$  and  $5 \times 2$



Can you represent this array using another object?



Complete the number sentences to describe the arrays.



$2 \times 3$

and

$\_\_\_ \times \_\_\_$



$\_\_\_ \times \_\_\_$

and

$\_\_\_ \times \_\_\_$



# INTELLIGENT PRACTICE



Draw an array to show:

$$4 \times 5 = 5 \times 4$$

$$3 \text{ lots of } 10 = 10 \text{ lots of } 3$$





# DIVE DEEPER 1

With 12 cubes, how many different arrays can you create?

Once you have created your array complete:

$$\underline{\quad} \times \underline{\quad} = \underline{\quad} \times \underline{\quad}$$

Draw 12 squares instead.



# DIVE DEEPER 1

With 12 cubes, how many different arrays can you create?

Once you have created your array complete:

\_\_\_ × \_\_\_ = \_\_\_ × \_\_\_

$$1 \times 12 = 12 \times 1$$

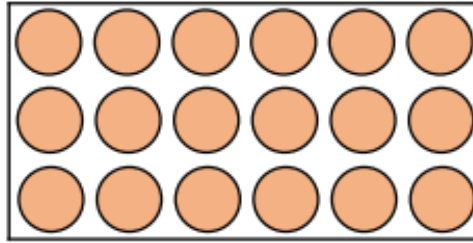
$$2 \times 6 = 6 \times 2$$

$$3 \times 4 = 4 \times 3$$



# DIVE DEEPER 2

Find different ways to solve six lots of three.



Part of this array is hidden.



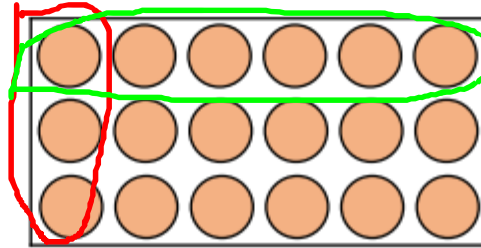
The total is less than 16

What could the array be?



# DIVE DEEPER 2

Find different ways to solve six lots of three.



Count in 3s  
3 lots of 3 add 3  
lots of 3  
 $5 \times 3$  add  $1 \times 3$   
etc.

Part of this array is hidden.



$4 \times 2$   
 $5 \times 2$   
 $6 \times 2$   
 $7 \times 2$

The total is less than 16

What could the array be?

