







Multiplication & Division

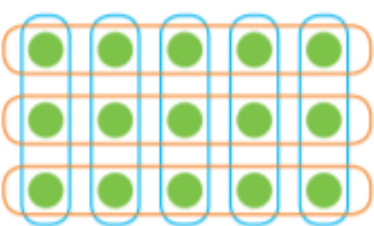





Ask your helper to time you for 60 seconds. Complete as many of the questions in the first column as you can, then mark them together. Next week, try and beat your score using the next column.

$3 \times 2 =$	$1 \times 5 =$	$1 \times 2 =$	$12 \times 2 =$	$1 \times 2 =$
$4 \times 5 =$	$5 \times 2 =$	$3 \times 3 =$	$11 \times 5 =$	$2 \times 3 =$
$2 \times 10 =$	$10 \times 5 =$	$5 \times 5 =$	$10 \times 2 =$	$3 \times 5 =$
$6 \times 5 =$	$4 \times 3 =$	$7 \times 10 =$	$1 \times 5 =$	$4 \times 3 =$
$3 \times 3 =$	$7 \times 10 =$	$9 \times 3 =$	$2 \times 3 =$	$5 \times 5 =$
$2 \times 5 =$	$2 \times 3 =$	$12 \times 5 =$	$3 \times 5 =$	$12 \times 3 =$
$1 \times 5 =$	$4 \times 2 =$	$11 \times 2 =$	$6 \times 3 =$	$11 \times 2 =$
$0 \times 3 =$	$6 \times 5 =$	$2 \times 10 =$	$4 \times 10 =$	$10 \times 3 =$
$10 \times 10 =$	$8 \times 10 =$	$4 \times 3 =$	$7 \times 2 =$	$9 \times 10 =$
$12 \times 2 =$	$9 \times 5 =$	$6 \times 5 =$	$9 \times 5 =$	$8 \times 10 =$
$11 \times 5 =$	$10 \times 3 =$	$8 \times 10 =$	$8 \times 3 =$	$7 \times 10 =$
$6 \times 3 =$	$11 \times 2 =$	$10 \times 2 =$	$2 \times 10 =$	$6 \times 3 =$
$5 \times 5 =$	$12 \times 5 =$	$12 \times 2 =$	$6 \times 10 =$	$0 \times 5 =$
$4 \times 2 =$	$3 \times 3 =$	$2 \times 3 =$	$2 \times 3 =$	$6 \times 2 =$
$6 \times 2 =$	$5 \times 10 =$	$7 \times 5 =$	$8 \times 5 =$	$8 \times 3 =$
$8 \times 10 =$	$10 \times 2 =$	$8 \times 10 =$	$9 \times 2 =$	$4 \times 2 =$
$4 \times 3 =$	$11 \times 5 =$	$9 \times 10 =$	$4 \times 5 =$	$11 \times 5 =$
$2 \times 2 =$	$9 \times 3 =$	$11 \times 3 =$	$3 \times 3 =$	$12 \times 3 =$
$5 \times 10 =$	$1 \times 10 =$	$12 \times 2 =$	$11 \times 2 =$	$0 \times 10 =$
$6 \times 4 =$	$0 \times 2 =$	$6 \times 5 =$	$12 \times 5 =$	$2 \times 2 =$

Write two multiplication sentences for each of these arrays. The first one has been done for you.

		
$4 \times 3 = 12$		
$3 \times 4 = 12$		
		

Write two division sentences for each of these arrays. Try using coloured pencils to group the dots.

		
$15 \div 5 = 3$		
$15 \div 3 = 5$		
		

Commutativity

The commutative property of multiplication means that when two numbers are multiplied together it doesn't matter which one comes first because the product will be the same. Division does not have commutativity.

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

$$1 \times 3 = 3 \times \underline{\hspace{2cm}}$$

$$3 \times 5 = 5 \times \underline{\hspace{2cm}}$$

$$3 \times 10 = 10 \times \underline{\hspace{2cm}}$$

$$7 \times 10 = 10 \times \underline{\hspace{2cm}}$$

$$11 \times 3 = 3 \times \underline{\hspace{2cm}}$$

Fill in the missing numbers:

$$\underline{\hspace{2cm}} \times 2 = 2 \times 5$$

$$5 \times 2 = \underline{\hspace{2cm}}$$

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

$$\underline{\hspace{2cm}} \times 3 = 3 \times 8$$

$$3 \times 8 = \underline{\hspace{2cm}}$$

$$8 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$10 \times 2 = 2 \times \underline{\hspace{2cm}}$$

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

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

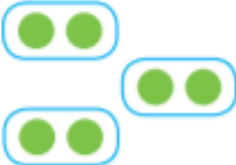

$$4 \times 6 = \underline{\hspace{2cm}} \times 4$$

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

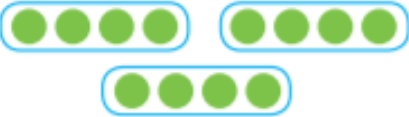






$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Challenge: Ryan has 3 boxes with 5 cars in each. His friend Sam has 5 boxes with 3 cars in each. Who has the most cars?



Complete the table. The first one is done for you.

Factors	Repeated Addition	Groups	Array	Related Calculation (commutative property)	Product
3×2	$2+2+2$			2×3	6
2×5					
3×10					
6×2					
4×3					
3×5					
2×10					

Complete the table. The first one is done for you.

Division	Sharing	Answer	Related Multiplication Facts
$12 \div 3$		4	$3 \times 4 = 12$ $4 \times 3 = 12$
$8 \div 2$			
$10 \div 5$			
$20 \div 10$			
$12 \div 2$			
$9 \div 3$			
$15 \div 5$			

Emma and James are visiting the circus. Can you work out the answers to these problems for them? Use arrays, sharing, objects, or anything else that may help you. Don't forget to look for the important information!

<p>Each children's ticket costs £5. How much do the 2 children pay altogether?</p> <p><input type="text"/></p>	<p>Each section of the circus has 10 seats. If 40 people arrive, how many sections will they need?</p> <p><input type="text"/></p>	<p>There are 3 clowns and each clown juggles 4 balls. How many balls altogether?</p> <p><input type="text"/></p>
<p>There are 20 sweets in Emma's packet. If she shares them equally with James, how many sweets will they have each?</p> <p><input type="text"/></p>	<p>9 trapeze artists swing on 3 swings. How many trapeze artists are on each swing?</p>  <p><input type="text"/></p>	<p>The motorbike riders are next. There are 18 wheels altogether. How many motorbikes are there?</p>  <p><input type="text"/></p>
<p>The circus dancers wear feathers in their hair. There are 5 dancers and each dancer wears 3 feathers. How many feathers altogether?</p> <p><input type="text"/></p>	<p>There are 7 acrobats. Each acrobat does 5 tumblers. How many tumblers altogether?</p> <p><input type="text"/></p>	<p>At the end of the show, 10 performers take 30 bows altogether. How many bows does each performer take?</p> <p><input type="text"/></p>