



GRADE 3 / WATCH MR DJ SOLVE

MULTIPLICATION STRATEGIES AND PROPERTIES

Start with the same example used in the lesson slides.

**WATCH MR DJ SOLVE****Use a turn of an array to explain $3 \times 6 = 6 \times 3$.**

- 1** Draw an array.
- 2** Turn rows into columns.
- 3** Both arrangements have 18 dots.

Answer: **18****REMEMBER** use array turns, regrouping and breaking apart to explain facts.

Read each step and explain why it is valid. The next pages demonstrate the methods in more detail. Then use the large work areas on the numbered practice pages.



GRADE 3 / WORKED METHODS

MULTIPLICATION STRATEGIES AND PROPERTIES

Read a complete example before trying the matching method.

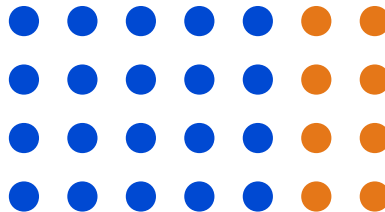


Use these examples as a reference. Keep each quantity and its unit visible. A different valid method is welcome unless a question specifically requests one.

Break an array apart

$$4 \times 7 = 4 \times 5 + 4 \times 2 = 28$$

1. Keep 4 rows.
2. Split each row into 5 and 2.
3. $20 + 8 = 28$.



$$4 \times 5 + 4 \times 2 = 28$$



GRADE 3 / WORKED METHODS

MULTIPLICATION STRATEGIES AND PROPERTIES

Read a complete example before trying the matching method.



Use these examples as a reference. Keep each quantity and its unit visible. A different valid method is welcome unless a question specifically requests one.

Regroup three factors

$$2 \times (3 \times 4) = (2 \times 3) \times 4 = 24$$

1. First grouping: $2 \times 12 = 24$.
2. Second grouping: $6 \times 4 = 24$.
3. The same equal groups have been combined in another order.

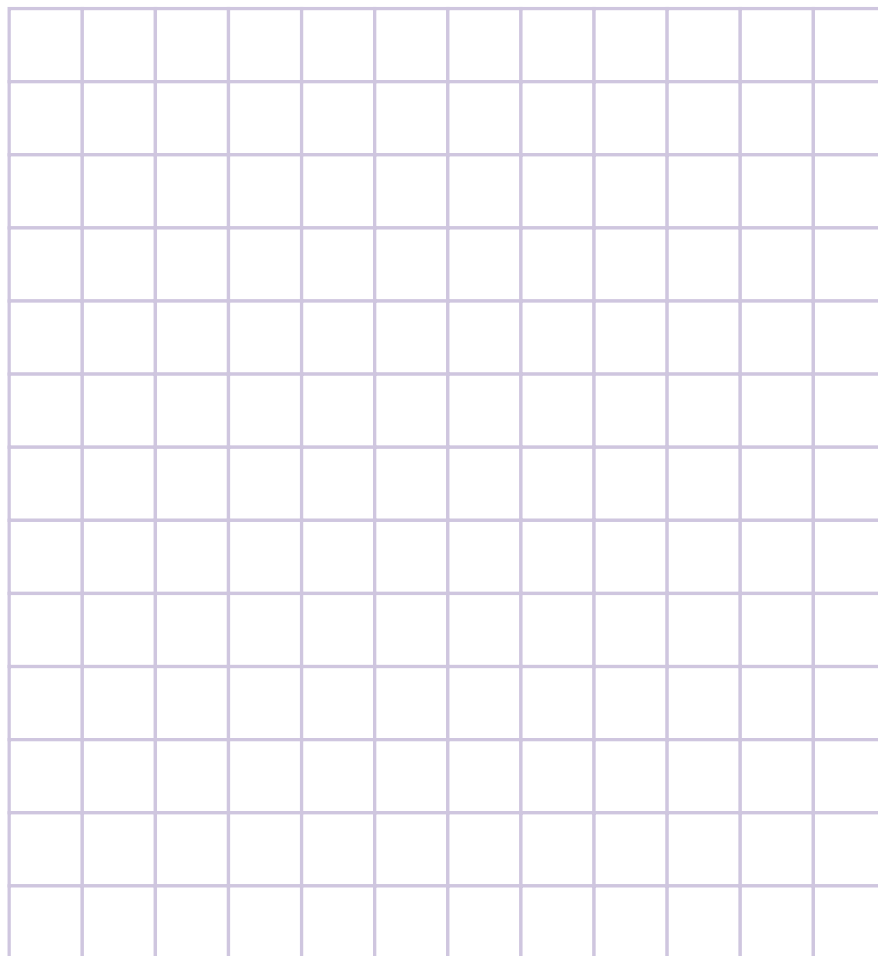
GRADE 3 / MATHEMATICAL WORK TOOL

MULTIPLICATION STRATEGIES AND PROPERTIES

Use labels and a clear scale.



Draw and label a model. Choose what one unit square means.





GRADE 3 / PRACTICE

MULTIPLICATION STRATEGIES AND PROPERTIES

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

🔪 Mild 1. Split 3×6 into 3×5 and 3×1 . Find the total.

Grid area for problem 1.

My answer / conclusion: _____

🔪 Mild 2. Find $2 \times (3 \times 3)$. Show a second grouping.

Grid area for problem 2.

My answer / conclusion: _____



Date _____

MULTIPLICATION STRATEGIES AND PROPERTIES

A cartoon illustration of an orange fox with large eyes, wearing a purple scarf, and holding a yellow pencil in its right hand. The fox is smiling and looking towards the viewer.

 Medium

 Medium

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GRADE 3 / PRACTICE

MULTIPLICATION STRATEGIES AND PROPERTIES

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

🔊 Medium

5. Draw an array for 3×6 . Split it two different ways. Check both totals.

My answer / conclusion: _____



Date _____

MULTIPLICATION STRATEGIES AND PROPERTIES

A cartoon fox mascot with orange fur, large eyes, and a purple scarf, holding a yellow pencil.

6. Digit says $3 \times (5 + 2) = 3 \times 5 + 2$. Use equal groups to repair it.

My answer / conclusion: _____



Date _____

MULTIPLICATION STRATEGIES AND PROPERTIES

A cartoon fox mascot with orange fur, large eyes, and a purple scarf, holding a yellow pencil.

7. Is $3 \div 1$ equal to $1 \div 3$? Use sharing to explain.

My answer / conclusion: _____



Date _____

MULTIPLICATION STRATEGIES AND PROPERTIES

A cartoon fox mascot with orange fur, large eyes, and a purple scarf, holding a yellow pencil.

🌶️🌶️🌶️🌶️ **Extra Spicy**

Compare.

My answer / conclusion: _____