



GRADE 4 / WATCH MR DJ SOLVE

**MULTIPLYING A FRACTION BY A WHOLE NUMBER**

Start with the same example used in the lesson slides.

**WATCH MR DJ SOLVE**

Find  $3 \times 2/5$ . Draw equal groups and express the product as a fraction and, if needed, a mixed number.

- 1 3 copies each contain 2 pieces of size  $1/5$ .
- 2 Total pieces:  $3 \times 2 = 6$ .
- 3  $6/5 = 1 \frac{1}{5}$ .

Answer:  **$1 \frac{1}{5}$**



**REMEMBER** Count equal groups of fractional units; the size of each unit stays fixed.

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 4 / WORKED METHODS

**MULTIPLYING A FRACTION BY A WHOLE NUMBER**

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.

**Count unit fractions across equal groups**

$$3 \times 2/5 = 6/5 = 1 \frac{1}{5}$$

1. Each of three groups contains two fifths.
2.  $3 \times 2 = 6$  unit fifths.
3. Five fifths make 1 whole, leaving  $1/5$ .

**Equal fractional groups**

$$2/5 + 2/5 + 2/5$$

$$3 \times 2/5 = 6/5 = 1 \frac{1}{5}$$

GRADE 4 / WORKED METHODS

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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.

**Use a fraction in a measurement story****4 ribbons of  $\frac{3}{4}$  m total 3 m**

1. Four copies contain  $4 \times 3 = 12$  fourth-meters.
2.  $12/4 = 3$ .
3. Repeated addition gives the same length.



GRADE 4 / PRACTICE

# MULTIPLYING A FRACTION BY A WHOLE NUMBER

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. Find  $5 \times \frac{1}{4}$ . Draw equal groups and express the product as a fraction and, if needed, a mixed number.**

My answer / conclusion: \_\_\_\_\_

**GRADE 4 / PRACTICE****MULTIPLYING A FRACTION BY A WHOLE NUMBER**

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**

**2. Find  $2 \times 3/8$ . Draw equal groups and express the product as a fraction and, if needed, a mixed number.**

My answer / conclusion: \_\_\_\_\_

**◀◀ Medium**

**3. 3 ribbons are each  $3/4$  m long. What is their combined length?**

My answer / conclusion: \_\_\_\_\_



GRADE 4 / PRACTICE

# MULTIPLYING A FRACTION BY A WHOLE NUMBER

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

4. Write  $4 \times \frac{2}{3}$  as repeated addition and as a product of a whole number and a unit fraction.

Grid area for problem 4.

My answer / conclusion: \_\_\_\_\_

Medium

5. Find the missing whole-number factor:  $\square \times \frac{3}{8} = 1 \frac{1}{2}$ . Explain with eighths.

Grid area for problem 5.

My answer / conclusion: \_\_\_\_\_



Date \_\_\_\_\_

## MULTIPLYING A FRACTION BY A WHOLE NUMBER

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

🔥🔥🔥 **Spicy** 6. A student writes  $3 \times \frac{2}{5} = \frac{6}{15}$ . Explain the mistaken unit change.

7. Is a fraction multiplied by 4 always greater than 1? Give examples on both sides of 1.

Multiplying a fraction by a whole number / practice · page 7



GRADE 4 / PRACTICE

# MULTIPLYING A FRACTION BY A WHOLE NUMBER

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.

Extra Spicy

8. Explain why  $3 \times \frac{2}{7}$  and  $2 \times \frac{3}{7}$  agree. Can this help you rearrange other whole-number multiples?

Grid area for working out the answer.

My answer / conclusion: \_\_\_\_\_