

Multiplying Fractions by Whole Numbers

Chapter 13: Animal Jumps · Topic 2

Key Concept

To multiply a fraction by a whole number, we multiply the numerator by the whole number and keep the denominator the same - $3 \times \frac{1}{4} = \frac{3}{4}$.

This makes sense because multiplying means repeated addition: $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{3}{4}$, which matches $3 \times \frac{1}{4}$.

Sometimes the answer needs simplifying - for example, $4 \times \frac{1}{2} = \frac{4}{2}$, which simplifies to 2 (a whole number).

Practising this skill helps us solve real problems, like finding the total amount when using a fraction of an ingredient multiple times.

Quick Revision Notes

- Multiply the numerator by the whole number, keep denominator.
- $3 \times \frac{1}{4} = \frac{3}{4}$.
- This matches repeated addition: $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{3}{4}$.
- $4 \times \frac{1}{2} = \frac{4}{2}$, which simplifies to 2.
- Simplify the answer when possible.
- This connects to the idea of repeated addition.
- Practice helps solve real fraction-multiplication problems.
- This skill applies to recipes and measurements.

Practice Questions

- 1 Solve: $5 \times \frac{1}{3} = ?$
- 2 Solve: $4 \times \frac{1}{5} = ?$
- 3 Solve: $6 \times \frac{1}{2} = ?$ (simplify your answer)
- 4 Explain why $3 \times \frac{1}{4}$ equals $\frac{1}{4} + \frac{1}{4} + \frac{1}{4}$.
- 5 Create your own fraction multiplication problem.
- 6 Practice three more problems multiplying fractions by whole numbers.