

Addition and Subtraction of Fractions

Chapter 2: Fractions · Topic 2

Key Concept

When fractions have the same denominator, we simply add or subtract the numerators and keep the denominator the same - like $\frac{2}{5} + \frac{1}{5} = \frac{3}{5}$.

When fractions have different denominators, we first find a common denominator, convert the fractions, then add or subtract - like $\frac{1}{2} + \frac{1}{3} = \frac{3}{6} + \frac{2}{6} = \frac{5}{6}$.

After adding or subtracting, we should simplify the answer if possible, to express it in its simplest form.

Practising fraction addition and subtraction prepares us for real problems, like combining ingredient amounts in a recipe or comparing portions.

Quick Revision Notes

- Same denominator: add/subtract numerators, keep denominator.
- $\frac{2}{5} + \frac{1}{5} = \frac{3}{5}$.
- Different denominators: find common denominator first.
- $\frac{1}{2} + \frac{1}{3} = \frac{3}{6} + \frac{2}{6} = \frac{5}{6}$.
- Simplify the answer after adding/subtracting.
- This skill applies to recipes and comparing portions.
- Practice builds confidence with fraction operations.
- Common denominators make addition/subtraction possible.

Practice Questions

- 1 Solve: $\frac{3}{8} + \frac{2}{8} = ?$
- 2 Solve: $\frac{1}{3} + \frac{1}{4} = ?$ (find common denominator)
- 3 Solve: $\frac{5}{6} - \frac{1}{6} = ?$
- 4 Solve: $\frac{2}{3} - \frac{1}{4} = ?$ (find common denominator)
- 5 Simplify your final answers where possible.
- 6 Practice three more fraction addition/subtraction problems.