

Addition and Subtraction of Fractions

Chapter 7: Fractions · Topic 3

Key Concept

For example, to add $\frac{1}{4}$ and $\frac{1}{3}$, find the LCM of 4 and 3 (which is 12), convert both fractions ($\frac{1}{4} = \frac{3}{12}$ and $\frac{1}{3} = \frac{4}{12}$), then add the numerators: $\frac{3}{12} + \frac{4}{12} = \frac{7}{12}$. After performing the operation, the resulting fraction should be simplified to its lowest terms if possible, by dividing both numerator and denominator by their HCF, giving the cleanest, most standard form of the answer.

Quick Revision Notes

- Same denominator: add/subtract numerators directly, keep denominator unchanged.
- Different denominators: convert to a common denominator (using LCM) first.
- Example: $\frac{1}{4} + \frac{1}{3} = \frac{3}{12} + \frac{4}{12} = \frac{7}{12}$.
- Simplify the final answer to lowest terms by dividing by the HCF of numerator and denominator.

Practice Questions

- 1 Add $\frac{2}{5}$ and $\frac{1}{3}$.
- 2 Subtract $\frac{1}{6}$ from $\frac{5}{6}$.
- 3 Add $\frac{1}{2}$ and $\frac{1}{3}$, then simplify the answer to its lowest terms if needed.