

Understanding and Comparing Fractions

Chapter 2: Fractions · Topic 1

Key Concept

To compare fractions with different denominators, like $\frac{1}{3}$ and $\frac{1}{4}$, we can find a common denominator - for 3 and 4, the common denominator is 12.

Converting: $\frac{1}{3} = \frac{4}{12}$, and $\frac{1}{4} = \frac{3}{12}$. Since $\frac{4}{12}$ is more than $\frac{3}{12}$, we know $\frac{1}{3}$ is greater than $\frac{1}{4}$.

We can also compare fractions by thinking about their size - a fraction with a smaller denominator (dividing into fewer parts) is generally bigger, if the numerator is the same.

Understanding how to compare fractions helps us solve problems involving sharing, measuring, and comparing quantities in daily life.

Quick Revision Notes

- To compare fractions, find a common denominator.
- $\frac{1}{3} = \frac{4}{12}$ and $\frac{1}{4} = \frac{3}{12}$.
- $\frac{4}{12}$ is greater than $\frac{3}{12}$, so $\frac{1}{3} > \frac{1}{4}$.
- A smaller denominator with the same numerator means a bigger fraction.
- Common denominators allow fair comparison.
- Comparing fractions helps with sharing and measuring.
- This skill builds on earlier fraction understanding.
- Practice makes fraction comparison easier.

Practice Questions

- 1 Compare $\frac{1}{2}$ and $\frac{1}{5}$ using a common denominator.
- 2 Compare $\frac{2}{3}$ and $\frac{3}{4}$ using a common denominator.
- 3 Draw pictures to show why $\frac{1}{3}$ is greater than $\frac{1}{4}$.
- 4 Order three fractions from smallest to largest.
- 5 Explain the common denominator method in your own words.
- 6 Practice comparing five pairs of fractions.