

SUMMARY

NCERT Class 6 Maths Chapter 7: Fractions

Overview

This summary of **NCERT Class 6 Maths Chapter 7: Fractions** introduces the concept of fractions as equal parts of a whole, including proper, improper, and mixed fractions. Designed for students, teachers, and parents, it covers fraction representation, comparison, and operations, making it ideal for exam preparation and practical applications. Visit GovtJobsNet.com for more educational resources.

Key Concepts

- **Fractions as Equal Shares**

- A fraction represents a part of a whole, written as $\frac{a}{b}$ where a is the numerator and b is the denominator.
- Example: Dividing one roti among 4 children gives $\frac{1}{4}$ each.

- **Fractional Units**

- Fractions can represent different shapes (e.g., circles, rectangles) as long as parts are equal.
- Example: Cutting a chkiki into 8 equal pieces makes each $\frac{1}{8}$.

- **Measuring with Fractions**

- Fractions measure lengths or quantities (e.g., $\frac{3}{4}$ m on a number line).
- Example: Mark $\frac{2}{3}$ between 0 and 1 on a number line.

- **Mixed Fractions**

- Mixed fractions combine a whole number and a fraction (e.g., $1\frac{2}{3}$).
- Conversion: $1\frac{2}{3} = \frac{5}{3}$.
- Example: $2\frac{1}{4}$ rotis can be written as $\frac{9}{4}$.

- **Equivalent Fractions**

- Equivalent fractions represent the same value (e.g., $\frac{1}{2} = \frac{2}{4} = \frac{3}{6}$).
- Method: Multiply or divide numerator and denominator by the same number.
- Example: $\frac{4}{3} = \frac{12}{9}$ by multiplying by 3.

- **Adding and Subtracting Fractions**

- Add/subtract fractions with the same denominator by adding/subtracting numerators (e.g., $\frac{5}{8} - \frac{3}{8} = \frac{2}{8}$).
- For different denominators, find a common denominator first.
- Example: $\frac{1}{3} + \frac{1}{6} = \frac{2}{6} + \frac{1}{6} = \frac{3}{6} = \frac{1}{2}$.
- **Fraction Wall and Number Line**
 - A fraction wall shows relationships (e.g., $\frac{1}{2} = \frac{2}{4}$).
 - Number lines help visualize fractions between 0 and 1.
 - Example: Place $\frac{3}{10}$ on a number line.

Practice Questions

- Divide a rectangle into 5 equal parts and label each as a fraction.
- Convert $2\frac{3}{5}$ into an improper fraction.
- Find three equivalent fractions for $\frac{2}{3}$.
- Add $\frac{1}{4} + \frac{2}{4}$ and simplify the result.
- Subtract $\frac{7}{9} - \frac{2}{9}$ and verify on a number line.

Why This Chapter Matters

Understanding fractions is key to handling proportions, measurements, and real-world problems like cooking or budgeting. It lays the groundwork for advanced math topics like algebra and geometry. For more study materials and exam tips, explore GovtJobsNet.com.

Source: NCERT Class 6 Maths Chapter 7