Introduction to Decimals

Understanding Introduction to Fraction

- A decimal is a number that shows a part of a whole.
- It uses a dot (.) called a decimal point to separate the whole number from the fractional part.
- Decimal numbers are based on 10s and come from dividing a whole into 10 or 100 equal parts.
- The digits after the decimal point show tenths, hundredths, etc.
- **Example:** In 3.6 \rightarrow 3 is the whole part, 6 is the tenth part.

Key Points about Decimals

- Tenths place is the first digit after the decimal point
- Hundredths place is the second digit after the decimal point
- Decimals are used in money, weight, length, and measurements
- $\frac{1}{10} = 0.1, \frac{2}{10} = 0.2, \frac{1}{100} = 0.01$

Mixed Examples with Solutions

Example: Write $\frac{2}{10}$ as a decimal **Solution:** $\frac{2}{10} = 0.2$

Example: What is the place value of 7 in 3.74?

Solution: 7 is in the tenths place \rightarrow value = $\frac{7}{10}$ = 0.7

Example: Convert $\frac{1}{100}$ into a decimal

Solution: 1 ÷ 100 = 0.01

Example: Write the decimal form of "4 wholes and 5 tenths"

Solution: 4 + 0.5 = 4.5

Example: Write the number name for 6.23

Solution: Six and twenty-three hundredths

Summary Points

- A decimal shows a whole and a part together using a decimal point.
- Tenths and hundredths are commonly used in daily life.
- We can convert fractions like $\frac{1}{10}$ and $\frac{1}{100}$ into decimals.
- Decimal numbers help in measuring and comparing small quantities.
- Understanding decimals is useful in money, weight, and length problems.