Fractional Units and Equal

Fractional Units

A fractional unit is a part of a whole.

When something is divided into equal parts, each part is a fractional unit.

Example:

If a cake is divided into 4 equal parts:

- Each part = $\frac{1}{4}$ of the cake
- These are fractional units of the cake

What are Equal Shares?

When an object or quantity is divided into equal parts, each person or section gets an equal share.

Example:

- 4 friends share 1 pizza equally:
- Each friend gets $\frac{1}{4}$ of the pizza

Another example:

- If 2 chocolates are divided equally among 3 children:
- Each child gets $\frac{2}{3}$ chocolate

Real-Life Examples of Equal Shares:

- Cutting a sandwich into 2 equal parts \rightarrow each part = $\frac{1}{2}$
- Sharing ₹10 equally among 5 friends \rightarrow each gets ₹ $\frac{10}{5}$ = ₹2
- Filling 1 bottle equally into 4 glasses \rightarrow each glass gets $\frac{1}{4}$ of the bottle

Properties of Fractional Units and Equal Shares:

i. All parts must be equal to form correct fractions

Example:
$$\frac{1}{3}$$
, $\frac{2}{5}$



ii. The total of all equal shares equals the whole

Example:
$$\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{4}{4} = 1$$

iii. Each fractional unit is written as $\frac{1}{n}$, where n = total parts

Example:
$$\frac{1}{6}$$
 (when divided into 6 equal parts)

iv. More the number of equal parts, smaller each fractional unit

Example:
$$\frac{1}{8} < \frac{1}{4}$$

v. Fractional units are used in fair sharing and equal division