



মণিপুর সরকার (আম)

**DEPARTMENT OF EDUCATION (S)**  
Government of Manipur

## Chapter 12:

### Ratio and Proportion

#### **NOTES:**

In our daily life, many a times we compare two quantities of the same type. For example, Avnee and Shari collected flowers for Scrap notebook. Avnee collected 30 flowers and Shari collected 45 flowers.

So, we may say that Sari collected  $45 - 30 = 15$  flowers more than Avnee.

Also, if height of Rahim is 150 cm and that of Avnee is 140 cm. Then, we may say that the height of Rahim is  $150 \text{ cm} - 140 \text{ cm} = 10 \text{ cm}$  more than Avnee. This is one way of comparison by taking difference.

Note:

- Ratio is a pure number with no unit.
- A comparison by division is called ratio.
- An equality of two ratios is called a proportion.
- The order of terms in the proportion is important.
- In a proportion first and fourth terms are called extremes whereas the second and third terms are called middle terms.

Ratio:

The comparison of two quantities by division is called ratio.

We denote a ratio using the symbol ( $:$ ). The quantities can be compared only if they are in the same unit. If they are not in the same unit they are expressed in the same unit before there ratio is taken.



মণিপুর সরকার (আম)  
**DEPARTMENT OF EDUCATION (S)**  
Government of Manipur