

CHAPTER 05

Comparing Quantities using Proportion

Introduction:

In our day-to-day life, sometimes we need to compare quantities. We learnt that ratio and percentages are used to compare quantities. Generally, we compare two quantities either by finding the difference of their magnitudes or by finding the division of their magnitudes.

When we compare the quantities using concepts of ratio proportions, percentage etc. that is called 'Comparing quantities'.

Example:

If Deepika got 90 marks and Geethika got 95 marks in the same examination, then we say that Geethika scored 5 marks more than Deepika. This is one way of comparison by taking difference.

Consider another example,

Cost of car is Rs. 4, 50, 000 and that of a motor bike is Rs. 50, 000. The difference between their costs is Rs. 4, 00, 000 and if we compare by division.

$$\text{i.e. } \frac{4,50,000}{50,000} = \frac{9}{1}$$

Here, we can say that the cost of the car is nine times the cost of the motor bike. Thus in certain situations, comparison by division makes better sense than comparison by taking the difference.

The comparison by division is the ratio. A ratio is an ordered comparison of two quantities.

