

Ratio

REFL – LIFE EXAMPLE

- ❖ The concept of ratio is very commonly used in cooking. A recipe has ingredients in a certain fixed ratio. For example; the ratio of flour to sugar is 3: 1.
- ❖ Builders use ratio in constructing a building. The raw material used should be in fixed ratio to construct a strong building.

LEARNING OBJECTIVE

This lesson will help you to:

- ❖ Understand the concept of ratio.
- ❖ Simplify ratio and understand equivalent ratio.
- ❖ Determine and define unit rate.
- ❖ Use scale drawings to measure.

QUICK CONCEPT REVIEW

Ratio is two things compared to each other.

For example: 60 km per hour is a ratio or 12 girls to 13 boys in a class is a ratio.

PROPERTIES OF RATIO

- ❖ There are 3 ways to write a ratio, a to b; $\frac{a}{b}$ and a: b.
- ❖ A ratio can be scaled up.

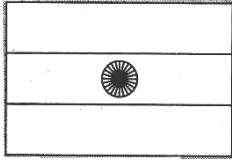
For example:



The ratio of checkered ball: striped balls is 3:1.

Amazing Facts

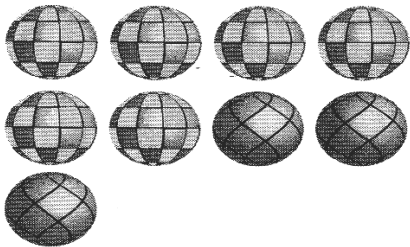
- ❖ The ratio of length to breadth of Indian flag is 3 : 2



- ❖ The ratio of speed of sound underwater to air is $5 : 1$ i.e., sound travels five times faster underwater than in air

PLAY TIME

Have a bag of red balls and blue balls. Divide your friends in teams. Distribute same number of red and blue balls to all the teams. Ask the team to divide the balls in asked ratio.



The ratio of checkered ball: striped balls is $4 : 5 = 3 : 1$, even though there are more balls.