

RATIO

RATIO is the relationship between two quantities which express how many times one quantity is the other quantity of the same kind and in the same unit. Ex $3:4 = \frac{3}{4}$

- ❖ Ratio between two quantities is obtained by dividing the first quantity by the second. *Ex: $A = 36$ and $B = 24 \therefore \text{Ratio of } A \text{ and } B = A:B = \frac{36}{24} = \frac{3}{2} = 3:2$*
- ❖ The two quantities in ratio are called its terms. The first term is called **antecedent** and the second term is called **consequent**.
- ❖ A ratio is a pure number and has **no unit**.
- ❖ A ratio should always be expressed in lowest terms.
- ❖ Continued ratios will be of the form **$a:b$ and $b:c$**

To Convert a Fractional Ratio into a Whole Number:

- Find the LCM of the denominators
Ex: $\frac{1}{3} : \frac{1}{4} \gg \text{LCM of } 3, 4 = 12$
- Multiply each term of the ratio by this LCM and simplify
$$\frac{1}{3} \times 12 : \frac{1}{4} \times 12 \gg 4 : 3$$