

PERCENTAGE

eg : Meeta saves Rs 400 from her salary.
If this is 10% of her salary. What is her salary?
Sol. Let her salary be Rs x 10% of Rs x = Rs 400
 $\frac{10}{100} \% \text{Rs. } x ! \text{Rs.400}$
 $\text{Rs. } x ! \text{Rs. } \frac{400 \% 100}{10} ! \text{Rs.4000}$

$\frac{\text{Increased Value \& Original value}}{\text{Original value}} \% 100$

eg : School team won 6 games this year;
4 games last year; increase = 6 - 4 = 2
Increase% ! $\frac{2}{4} \% 100 ! 50\%$

Way to Compare Quantity
Ram's Report Total : 320/400 Percent : 80%
Shyam's Report Total : 300/360 Percent : 63.33%

eg : A's salary is 50% more than B's salary
If B's salary = Rs. 100
 $\exists 50\% \text{ of B's salary } ! \frac{50}{100} \% 100 ! \text{Rs.50}$
A's salary = Rs 100 + Rs.50 = Rs 150
B's salary is less then by A's
salary by $\frac{50}{150} \% 100 ! 33 \frac{1}{3} \%$

Fraction into Percent
(i) $\frac{3}{5} \exists \frac{3}{5} \% 100 ! 60\%$
(ii) $\frac{3}{7} \exists \frac{3}{7} \% 100 ! \frac{300}{7} \% ! 42 \frac{6}{7} \%$

Ratio into Percent
 $3 : 8 \exists \frac{3}{8} \exists \frac{3}{8} \% 100 ! 37.5\%$

Decimal into Percent
 $6.7 \exists \frac{67}{10} \% 100 ! 670\%$

eg : 5% of 25
 $\frac{5}{100} \% 25 ! 1.25$

eg : 20% less than 70
20% of 70 ! $\frac{20}{100} \% 70 ! 14$
20% less then 70 = 70 - 14 = 56

eg : 10% more of 90
10% of 90 = $\frac{10}{100} \times 90 = 9$
10% more of 90 = 90 + 9 = 99

eg : Total students in class = 25
Number of girls = 15
% of girls ! $\frac{15}{25} \% 100 ! 60\%$
% of boys = 100 - 60 = 40%

$\frac{\text{Original value \& Decreased value}}{\text{Original value}} \% 100$

eg : In 10 years number of illtrate persons in
a country decreased from
150 lakh to 100 lakhs
decrease = 150 - 100 lakh = 50 lakh
decrease% ! $\frac{50}{150} \% 100 ! 33 \frac{1}{3} \%$

**PERCENT(%)
PER HUNDRED**

To convert

Drop the % sign and divide
the number by 100

Percent into Ratio

$25\% \exists \frac{25}{100} ! \frac{1}{4} ! 1 : 4$

Percent into Fraction

$30\% \exists \frac{30}{100} ! \frac{3}{10}$

Percent into decimal

(i) $6\% ! \frac{6}{100} ! .06$
(ii) $0.5\% ! \frac{0.5}{100} ! .005$