

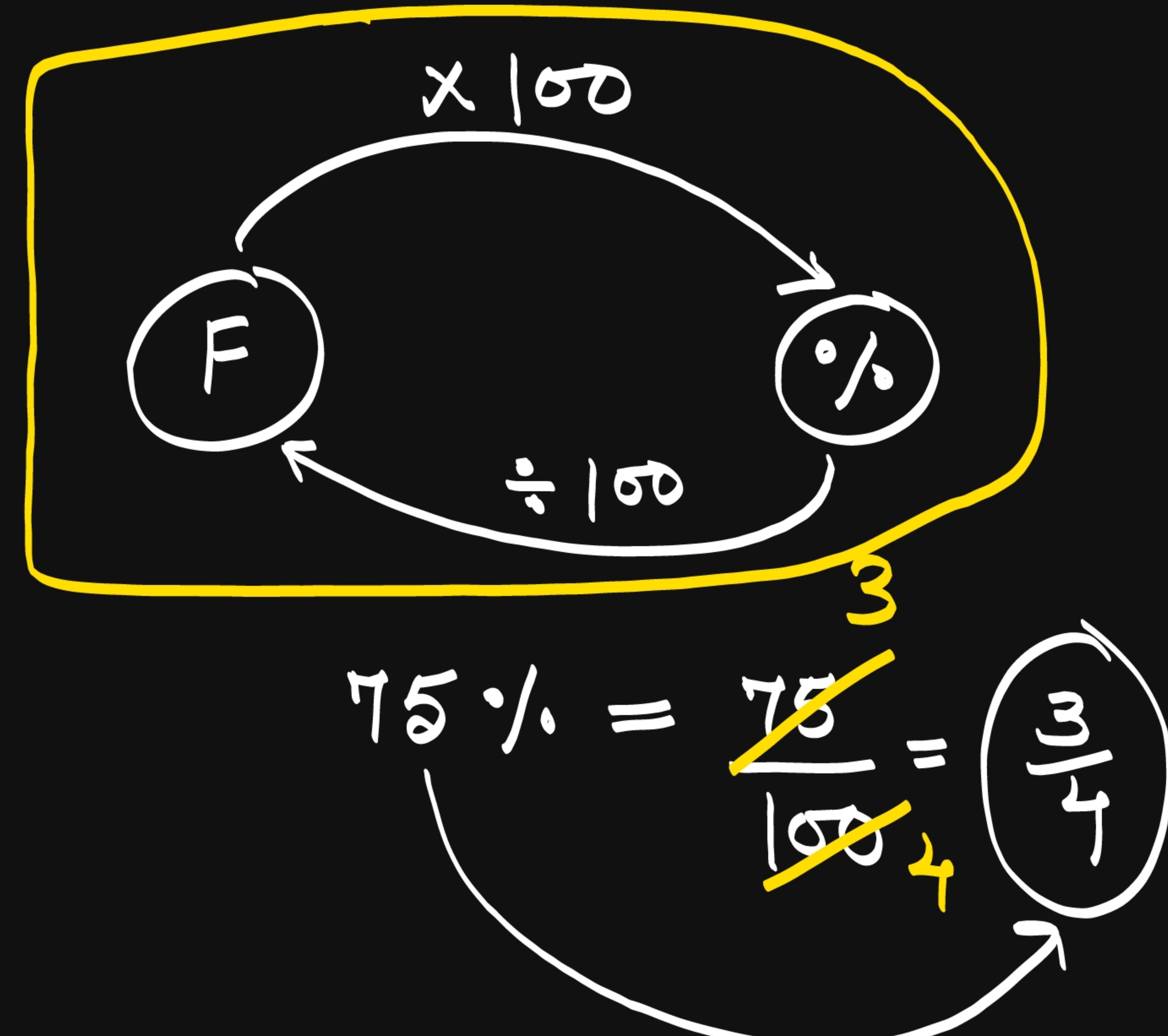
# % PERCENTAGE

$$\frac{70}{100} \rightarrow 70\%$$

$$\frac{3}{4} \times \cancel{100}^{25} = \boxed{75\%} \quad \frac{65}{100} \rightarrow 65\%$$

$$\frac{30}{50} \times \cancel{100}^2 = 60\%$$

# गुणितांश %



$$\frac{5}{2} = 500\% \\ = 250\%.$$

$$1 = 100\%$$

$$\frac{1}{2} = 50\%$$

$$\frac{1}{3} = 33\frac{1}{3}\%$$

$$\frac{1}{4} = 25\%$$

Fraction	Percentage	% in Decimal
$\frac{1}{1} \approx 1$	<u>100%</u>	<u>100%</u>
✓ $\frac{1}{2}$	✓ 50%	50%
✓ $\frac{1}{3}$	✓ $33\frac{1}{3}\%$	<u>33.33%</u>
✓ $\frac{1}{4}$	✓ 25%	25%
$\frac{1}{5}$	20%	20%
$\frac{1}{6}$	✓ $16\frac{2}{3}\%$	≈ <u>16.66%</u>
✓ $\frac{1}{7}$	<u><math>14\frac{2}{7}\%</math></u>	<u>14.28%</u>
✓ $\frac{1}{8}$	✓ $12\frac{1}{2}\%$	12.5%
✓ $\frac{1}{9}$	✓ $11\frac{1}{9}\%$	11.11%
$\frac{1}{10}$	10%	10%

Fraction	Percentage	% in Decimal
✓ $\frac{1}{11}$	$9\frac{1}{11}\%$	9.09%
✓ $\frac{1}{12}$	$8\frac{1}{3}\%$	8.33%
✓ $\frac{1}{13}$	$7\frac{9}{13}\%$	7.69%
✓ $\frac{1}{14}$	$7\frac{1}{7}\%$	7.14%
$\frac{1}{15}$	$6\frac{2}{3}\%$	6.66%
$\frac{1}{16}$	$6\frac{1}{4}\%$	6.25%
✓ $\frac{1}{17}$	$5\frac{15}{17}\%$	5.88%
$\frac{1}{18}$	$5\frac{5}{9}\%$	5.55%
✓ $\frac{1}{19}$	$5\frac{5}{19}\%$	5.26%
$\frac{1}{20}$	5%	5%

Fraction	Percentage	% in Decimal
✓ $\frac{1}{24}$	4 $\frac{1}{6}\%$	4.16%
✓ $\frac{1}{25}$	4%	4%

$\frac{1}{50}$

2%

$$\frac{1}{5} = 25\%$$

$\times 3$

$$\frac{3}{4} = 75\%$$

$$\frac{1}{5} \rightarrow 20\%$$

$\times 2$

$$\frac{2}{5} = 40\%$$

$\times 4$

$$\frac{4}{5} = 80\%$$

$$\frac{1}{8} = \left(12\frac{1}{2}\%\right) 5$$

$\times 3$

$$\frac{3}{8} = 3\left(12\frac{1}{2}\%\right)$$

$$= 37.5\%$$

$\times 5$

$$\frac{5}{8} = 60 + 2.5$$

$$= 62.5\%$$

$$\frac{5}{6} = 83\frac{1}{3}\%$$

$$\frac{1}{6} = \left(16\frac{2}{3}\%\right) 5$$

$$80 + 8\frac{1}{3}$$

$3\left(12\frac{1}{2}\%\right)$

$$= 37.5\%$$

$\times 3$

$$3\left(12\frac{1}{2}\%\right)$$

$$= 37.5\%$$

$\times 36$

$$36 + 1\frac{1}{2}$$

$37\frac{1}{2}$

$36 + 1 + \frac{1}{2}$

$$25\% = \frac{1}{4}$$

$$2.5\% = \frac{1}{40}$$

$$\underline{17.5\%} = \frac{1}{40}$$

$$\underline{32.5\%} = 30\% + 2.5\%$$

$$\frac{3}{10} + \frac{1}{40} = \frac{13}{40}$$

$$29\frac{1}{6}\% = 25\% + 4\frac{1}{6}\%$$

$$\frac{1}{4} + \frac{1}{24} = \frac{7}{24}$$

$$25 - \underline{22\frac{1}{3}}$$

$$2\frac{2}{3}$$

$$\downarrow \quad \underline{83\frac{1}{3}\%} = \underline{80\% + 3\frac{1}{3}\%}$$

$$100\% - \underline{16\frac{2}{3}\%}$$

$$1 - \frac{1}{6} = \frac{5}{6}$$

$$= \frac{4}{5} + \frac{1}{30}$$

$$= \frac{25}{30} = \frac{5}{6}$$

$$\underline{237.5\%} = 250\% + 37.5\%$$

$$2 + \frac{3}{8} = \underline{\frac{19}{8}}$$

Q:- 32.5% of 160

160 वाले 32.5%

$$12.5\% = \frac{1}{8}$$

$$37.5\% = \frac{3}{8}$$

$\therefore 160 \times \frac{3}{8} = 52$

$$2.5 \rightarrow \frac{1}{4}$$

$\times 7$

Q:- 37.5% of 64

$$\frac{3}{8} \times 64 = 24$$

Q:- 62.5% of 48

$$\frac{5}{8} \times 48 = 30$$

Q:- 17.5% of 16

$$\frac{7}{40} \times 16 = 2.8$$

## Shifting of %

a% of b = b% of a

Q:-  $\textcircled{38}$  of  $50\%$  =  $\textcircled{19}$

Q:-  $57$  of  $33\frac{1}{3}\%$   $37.5\% = \frac{1}{8}$

$$57 \times \frac{1}{3} = \textcircled{19}$$

Q:-  $840$  of  $62.5\%$

$$840 \times \frac{5}{8} = 525$$

Q:  $512$  of  $375\%$

$$\cancel{512}^{64} \times \frac{10}{8} = \underline{\underline{640}}$$