Fraction	Percentage
1	100%
$\frac{1}{2}$	50%
$\frac{1}{3}$	$33\frac{1}{3}\% = 33.33\%$
$\frac{1}{4}$	25%
$\frac{1}{5}$	20%
$\frac{1}{6}$	$16\frac{2}{3}\% = 16.66\%$
$\frac{1}{7}$	$14\frac{2}{7}\% = 14.28\%$
$\frac{1}{8}$	$12\frac{1}{2}\% = 12.5\%$
$\frac{1}{9}$	$11\frac{1}{9}\% = 11.11\%$

Fraction	Percentage
$\frac{1}{10}$	10%
$\frac{1}{11}$	$9\frac{1}{11}\% = 9.09\%$
$\frac{1}{12}$	$8\frac{1}{3}\% = 8.33\%$
$\frac{1}{14}$	$7\frac{1}{7}\% = 7.14\%$
$\frac{1}{15}$	$6\frac{2}{3}\% = 6.66\%$
$\frac{1}{16}$	$6\frac{1}{4}\% = 6.25\%$

Fraction	Percentage
$\frac{1}{20}$	5%
$\frac{1}{24}$	$4\frac{1}{6}\% = 4.16\%$
$\frac{1}{25}$	4%
$\frac{1}{30}$	$3\frac{1}{3}\% = 3.33\%$
$\frac{1}{50}$	2%

$\frac{1}{13} \rightarrow 7.69\%$

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

fraction से %

$\times 2$

$\frac{1}{3} = 33\frac{1}{3}\% \approx 33.33\%$

$\times 2$

$\frac{2}{3} = 66\frac{2}{3}\% \approx 66.66\%$

$\frac{1}{6} = 16\frac{2}{3}\%$

$\frac{5}{6} = 1 - \frac{1}{6} - 100\% - 16\frac{2}{3}\% = 83\frac{1}{3}\%$

$\times 3$

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

$\times 3$

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

$\frac{1}{7} = 14\frac{2}{7}\% \approx 14.28\%$

$\frac{2}{7} = 28\frac{4}{7}\% \approx 28.56\%$

$\times 5$

$\frac{5}{7} = \left(70 + \frac{10}{7}\right)\% = \left(70 + 1\frac{3}{7}\right)\% = 71\frac{3}{7}\%$

$\left(33 + \frac{1}{3}\right) \times 2$

$66 + \frac{2}{3}$

$= 66\frac{2}{3}$

$\times 7$

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

$\times 2$

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

$\times 3$

$\frac{3}{5} = 60\%$

$\frac{7}{5} = 140\%$

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

$\times 3$

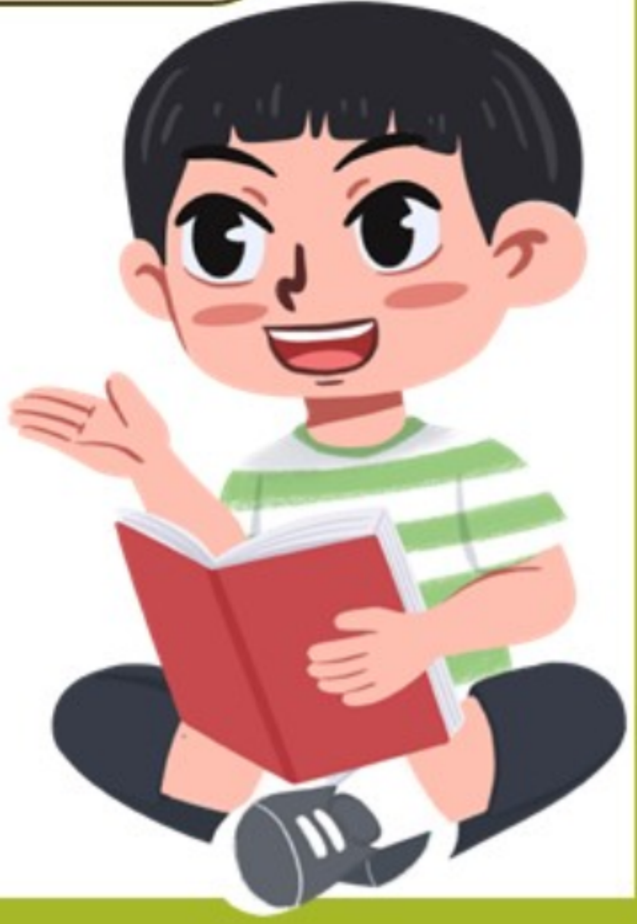
$\frac{3}{8} = 37.5\%$

$\times 5$

$\frac{5}{8} = 62.5\%$

$\times 7$

$\frac{7}{8} = 87.5\%$



$$\frac{1}{6} \longrightarrow 16\frac{2}{3}\%$$

$$\times 5$$

$$\frac{5}{6} \longrightarrow \left(80+3\frac{1}{3}\right)\% = 83\frac{1}{3}\%$$

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

$$= 100\% - 16\frac{2}{3}\% = 83\frac{1}{3}\%$$

EXAMPLE

$$16 + 3\frac{2}{5} = 19\frac{2}{5}$$

$$16 - 3\frac{2}{5} = 16 - \left(3 + \frac{2}{5}\right)$$
$$= 16 - 3 - \frac{2}{5}$$
$$= 13 - \frac{2}{5}$$
$$= 12 + \left(1 - \frac{2}{5}\right)$$
$$= 12 + \frac{3}{5} = 12\frac{3}{5}\ \checkmark$$

Trick :-

$$16 - 3\frac{2}{5} = 12\frac{3}{5}$$

$$87 - 25\frac{11}{19} = 61\frac{8}{19}\ \checkmark$$

$$109 - 51\frac{13}{27} = 57\frac{14}{27}\ \checkmark$$

EXAMPLE

$\frac{1}{9} \rightarrow 11\frac{1}{9}\% \approx 11.11\%$

$\times 7$

$\frac{2}{9} \rightarrow 22\frac{2}{9}\% \approx 22.22\%$

$\frac{7}{9} \rightarrow 77\frac{7}{9}\% \approx 77.77\%$

$\frac{1}{10} \rightarrow 10\%$

$\frac{3}{10} \rightarrow 30\%$

$\frac{17}{10} \rightarrow 170\%$

$\frac{1}{11} \rightarrow 9.09\%$

$\frac{2}{11} \rightarrow 18.18\%$

$\frac{5}{11} \rightarrow 45.45\%$

EXAMPLE

$\frac{1}{12} \to 8\frac{1}{3}\%$

$\times 5$

$\frac{5}{12} \to 41\frac{2}{3}\%$ $\approx 41.66\%$

$40 + 1\frac{2}{3}$

$\frac{1}{15} \to 6\frac{2}{3}\% \approx 6.66\%$

$\times 4$

$\frac{4}{15} \to 26\frac{2}{3}\%$

$\frac{1}{16} \to 6.25\%$

$\times 3$ $\times 3$

$\frac{3}{16} \to 18.75\%$

$\frac{7}{16} \to 43.75\%$

$1.25 = \frac{5}{4}$

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

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

$.5 = \frac{1}{2}$

$\frac{1}{3} \to .33\ldots\ldots$

$\frac{1}{6} \to .166\ldots\ldots$

$\frac{2}{3} \to .666\ldots\ldots$

$\frac{1}{9} \to .11\ldots\ldots$

$\frac{1}{8} = .125$

$\frac{1}{16} = .0625$

EXAMPLE

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

$\frac{3}{20} \rightarrow 15\%$ ✓

$\times 7$

$\frac{7}{20} \rightarrow 35\%$

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

$\times 9$ $\times 9$

$\frac{9}{40} \rightarrow 22.5\%$

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

$\frac{8}{25} \longrightarrow 32\%$

$$\begin{tikzcd} \frac{1}{16} \arrow[r] \arrow[d, bend right] & 6.25\% \arrow[d, bend left] \\ \frac{1}{32} \arrow[r] \arrow[d, bend right, "\times 3"'] & 3.125\% \\ \frac{3}{32} \arrow[r] & 9.375\% \end{tikzcd}$$

$$\begin{tikzcd} \frac{1}{8} \arrow[r] \arrow[d, bend right, "\div 10"'] & 12.5\% \\ \frac{1}{80} \arrow[r] & 1.25\% \end{tikzcd}$$

EXAMPLE

$\frac{15}{37} \rightarrow \frac{15}{37} \times 100\% \approx 40.5\%$

$$
\begin{array}{l}
37)\,1500\,(40.5 \\
\underline{148} \\
\;\;200 \\
\;\;185
\end{array}
$$

#

$$\frac{8}{7} = 1 + \frac{1}{7} = 100\% + 14.28\% \approx 114.28\%$$

$$\frac{22}{9} \longrightarrow 2 + \frac{4}{9} = 200\% + 44.44\% \approx 244.44\%$$

$$\frac{71}{12} \longrightarrow 6 - \frac{1}{12} = 600\% - 8\frac{1}{3}\% = 591\frac{2}{3}\%$$

Percentage to Fraction Conversion (भिन्न रूपांतरण का प्रतिशत)

$33.33\% \rightarrow \frac{1}{3}$

$66.66\% \rightarrow \frac{2}{3}$

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

$\times 7$

$175\% \rightarrow \frac{7}{4}$

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

$\times 3$

$60\% \rightarrow \frac{3}{5}$

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

$\times 3$

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

$\times 5$

$62.5\% = \frac{5}{8}$

$11.11\% = \frac{1}{9}$

$\times 4$

$44.44\% = \frac{4}{9}$

$\times 5$

$55.55\% = \frac{5}{9}$ ✓

$10\% = \frac{1}{10}$

$70\% = \frac{7}{10}$

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

$9 \times$ $\times 9$

$36\% \rightarrow \frac{9}{25}$

$9.09\% \rightarrow \frac{1}{11}$

$\times 3$

$27.27\% \rightarrow \frac{3}{11}$

$\times 7$

$63.63\% \rightarrow \frac{7}{11}$

$14\frac{2}{7}\% = 14 \cdot 28\% \longrightarrow \frac{1}{7}$

$28 \cdot 56\% \longrightarrow \frac{2}{7}$

$57\frac{1}{7}\% \longrightarrow \frac{4}{7}$

Percentage to Fraction Conversion (भिन्न रूपांतरण का प्रतिशत)

$14.28\% \rightarrow \frac{1}{7}$

$42.84\% \rightarrow \frac{3}{7}$

$6.25\% \rightarrow \frac{1}{16}$

×5

$31.25\% \rightarrow \frac{5}{16}$

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

$7.5\% \rightarrow \frac{3}{40}$

$22.5\% \rightarrow \frac{9}{40}$

$$28.33\% = 20\% + 8.33\%$$

$$= \frac{1}{5} + \frac{1}{12} = \frac{17}{60} \checkmark$$

$$46.25\% = 40\% + 6.25\%$$

$$= \frac{2}{5} + \frac{1}{16} = \frac{37}{80}$$

$$36\frac{2}{3}\% = 20\% + 16\frac{2}{3}\%$$

$$= \frac{1}{5} + \frac{1}{6} = \frac{11}{30}$$

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

$$= \frac{1}{4} + \frac{1}{24} = \frac{6+1}{24} = \frac{7}{24}$$

$$\boxed{29\frac{1}{6}\% = \frac{175}{6}\% = \frac{\cancel{175}^{\,7}}{6} \times \frac{1}{\cancel{100}_{\,4}} = \frac{7}{24}}$$

$23.33\% \longrightarrow 33.33\% - 10\%$

$$= \frac{1}{3} - \frac{1}{10}$$

$$= \frac{7}{30}$$

Percentage more than 100%

- $116.66\% = 100\% + 16.66\% = 1 + \frac{1}{6} = \frac{7}{6}$
- $228.56\% = 200\% + 28.56\% = 2 + \frac{2}{7} = \frac{16}{7}$

$335\frac{5}{7}\% = 300\% + 35\frac{5}{7}\%$

$= 3 + \frac{5}{14}$

$= \frac{47}{14}$

$537.5\% \rightarrow 500\% + 37.5\%$

$= 5 + \frac{3}{8} = \frac{43}{8}$