Thursday, November 3, 2022 5:04 PM

Fractions

Addition / sub of fractions :-

like fractions

$$\frac{7}{3} + \frac{5}{2} = \frac{14+15}{6} = \frac{29}{6}$$

$$\frac{7}{3} - \frac{5}{2} = \frac{14-15}{6} = \frac{-1}{6}$$

$$\frac{16}{20} = \frac{4}{5}$$

Multiplication

$$23 \Rightarrow \frac{23}{1}$$

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

Ex:- $$\frac{2}{3} \times \frac{27}{8} = \frac{2 \times 27}{3 \times 8} = \frac{54}{24} = \frac{27}{12} = \frac{9}{4}$$

$$\frac{2 \times 27}{3 \times 8} = \frac{9}{4}$$

$$7 \times \frac{3}{8} \Rightarrow \frac{7}{1} \times \frac{3}{8} = \frac{7 \times 3}{1 \times 8} = \frac{21}{8}$$

$$\frac{12}{27} \times \frac{5}{27} = \frac{12}{1} \times \frac{5}{27} = \frac{12 \times 5}{1 \times 27} = \frac{20}{9}$$

$12 \times \frac{5}{27} = \frac{12}{1} \times \frac{5}{27} = \frac{12 \times 5}{1 \times 27} = \frac{20}{9}$

$= \frac{4}{1} \times \frac{5}{9} = \frac{20}{9}$

Division of fractions

Reciprocal of a fraction.

$\frac{3}{2} \Rightarrow$ reciprocal is $\frac{2}{3}$

$4 \Rightarrow$ reciprocal is $\frac{1}{4}$

$\frac{1}{8} \Rightarrow$ reciprocal is 8

fraction 1 ÷ fraction 2. = fraction 1 × Reciprocal of fraction 2

$\frac{7}{18} \div \frac{21}{3} \Rightarrow \frac{1}{18}$

$\frac{7}{18} \times \frac{3}{21} = \frac{7 \times 3}{18 \times 21} = \frac{1}{18}$

$\frac{7}{18} \div 7 = \frac{7}{18} \div \frac{7}{1}$

$= \frac{7}{18} \times \frac{1}{7}$

$= \frac{7 \times 1}{18 \times 7} = \frac{1}{18}$

$\frac{29}{6} = 4\frac{5}{6}$

$6 \overline{)29}$ quotient 4, 24, remainder 5

$4\frac{5}{6} = \frac{6 \times 4 + 5}{6} = \frac{29}{6}$

$4\frac{5}{6} = \frac{6\times4+5}{6} = \frac{29}{6}$

$\frac{43}{8} =$

$\hookrightarrow 5\frac{3}{8}$

$$\begin{array}{r} 5 \\ 8\overline{)43} \\ 40 \\ \hline 3 \end{array}$$

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

$$\begin{array}{r} 1.25 \\ 4\overline{)5.00000} \\ 4\downarrow \\ \hline 10 \\ -8\downarrow \\ \hline 20 \\ -20 \\ \hline 0 \end{array}$$

$1.25 \Rightarrow \frac{125}{100} = \frac{5}{4}$