

ASSIGNMENT 24

STD IV

MATHEMATICS

CHAPTER 9

FRACTIONS

Do the following assignment in your Maths copy.

1. Add the following :

Eg. $\frac{12}{24} + \frac{18}{24} + \frac{10}{24}$

Solu: $\frac{12 + 18 + 10}{24}$

$$= \frac{40}{24}$$

$$= \frac{40 \div 2}{24 \div 2}$$

$$= \frac{20 \div 2}{12 \div 2}$$

$$= \frac{10 \div 2}{6 \div 2}$$

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

$$= 1\frac{2}{3}$$

a) $\frac{11}{13} + \frac{10}{13}$

b) $\frac{7}{41} + \frac{21}{41}$

c) $\frac{10}{43} + \frac{14}{43} + \frac{28}{43}$

2. Fill in the blanks :

Eg. $\frac{8}{11} + \frac{\quad}{11} + \frac{1}{11} = \frac{10}{11}$

$$\frac{8}{11} + \frac{1}{11} = \frac{8+1}{11} = \frac{9}{11}$$

$$\frac{10}{11} - \frac{9}{11} = \frac{10-9}{11} = \frac{1}{11}$$

Ans. 1

a) $\frac{4}{10} + \frac{\quad}{10} = \frac{9}{10}$

b) $\frac{23}{54} + \frac{9}{54} + \frac{\quad}{54} = \frac{48}{54}$

3. Add the following :

Eg. $\frac{1}{3} + \frac{3}{5} + \frac{7}{12}$

L.C.M of 3, 5 and 12

$$= 60$$

$$\frac{1}{3} = \frac{1 \times 20}{3 \times 20} = \frac{20}{60}$$

$$\frac{3}{5} = \frac{3 \times 12}{5 \times 12} = \frac{36}{60}$$

$$\frac{7}{12} = \frac{7 \times 5}{12 \times 5} = \frac{35}{60}$$

ROUGH

$$\begin{array}{r|l} 3 & 3 \\ \hline & 1 \end{array}$$

$$\begin{array}{r|l} 5 & 5 \\ \hline & 1 \end{array}$$

$$\begin{array}{r|l} 2 & 12 \\ \hline 2 & 6 \\ \hline 3 & 3 \\ \hline & 1 \end{array}$$

$$3 = 3 \times 1$$

$$5 = 5 \times 1$$

$$12 = 2 \times 2 \times 3 \times 1 = 2^2 \times 3$$

$$\text{L.C.M} = 2 \times 2 \times 3 \times 5 = 60$$

$$\frac{20}{60} + \frac{36}{60} + \frac{35}{60}$$

$$= \frac{20 + 36 + 35}{60}$$

$$= \frac{91}{60}$$

$$= 1 \frac{31}{60}$$

$$\text{a) } \frac{1}{2} + \frac{4}{5} + \frac{3}{15}$$

$$\text{b) } \frac{1}{2} + \frac{3}{5} + \frac{3}{4}$$

$$\text{c) } \frac{2}{3} + \frac{4}{5} + \frac{5}{6}$$