

EXERCISE – 6F

Q-1. Add the following –

$$\begin{aligned} \text{a. } & \frac{3}{4} + \frac{1}{8} \\ & = \frac{6+1}{8} = \frac{7}{8} \end{aligned}$$

$$\begin{array}{r|l} 2 & 4 \quad 8 \\ \hline 2 & 2 \quad 4 \\ \hline & 1 \quad 2 \quad \text{LCM} = 2 \times 2 \times 2 = 8 \end{array}$$

$$\begin{aligned} \text{b. } & \frac{3}{10} + \frac{2}{5} \\ & = \frac{3+4}{10} = \frac{7}{10} \end{aligned}$$

$$\begin{array}{r|l} 5 & 5 \quad 10 \\ \hline & 1 \quad 2 \quad \text{LCM} = 5 \times 2 = 10 \end{array}$$

$$\begin{aligned} \text{d... } & \frac{1}{2} + \frac{1}{12} \\ & = \frac{6+1}{12} = \frac{7}{12} \end{aligned}$$

$$\begin{array}{r|l} 2 & 2 \quad 12 \\ \hline 2 & 1 \quad 6 \\ \hline & 1 \quad 3 \quad \text{LCM} = 2 \times 2 \times 3 = 12 \end{array}$$

$$\begin{aligned} \text{i. } & \frac{3}{10} + \frac{1}{2} + \frac{3}{5} \\ & = \frac{3+5+6}{10} = \frac{14}{10} = \frac{7}{5} = 1 \frac{2}{5} \end{aligned}$$

$$\begin{array}{r|l} 2 & 10 \quad 2 \quad 5 \\ \hline 5 & 5 \quad 1 \quad 5 \\ \hline & 1 \quad 1 \quad 1 \quad \text{LCM} = 2 \times 5 = 10 \end{array}$$

$$\begin{aligned} \text{j. } & \frac{3}{4} + \frac{5}{12} + \frac{2}{3} \\ & = \frac{9+5+8}{12} = \frac{22}{12} = \frac{11}{6} = 1 \frac{5}{6} \end{aligned}$$

$$\begin{array}{r|l} 2 & 4 \quad 12 \quad 3 \\ \hline 2 & 2 \quad 6 \quad 3 \\ \hline 3 & 1 \quad 3 \quad 3 \\ \hline & 1 \quad 1 \quad 1 \quad \text{LCM} = 2 \times 2 \times 3 = 12 \end{array}$$

$$\begin{aligned} \text{o. } & 2 \frac{1}{9} + 1 \frac{1}{3} \\ & = \frac{19}{9} + \frac{4}{3} \\ & = \frac{19+12}{9} = \frac{31}{9} = 3 \frac{4}{9} \end{aligned}$$

$$\begin{array}{r|l} 3 & 9 \quad 3 \\ \hline & 3 \quad 1 \quad \text{LCM} = 3 \times 3 = 9 \end{array}$$

Q-2. Subtract the following –

$$\begin{aligned} \text{a. } & \frac{1}{2} - \frac{3}{8} \\ & = \frac{4-3}{8} = \frac{1}{8} \end{aligned}$$

$$\begin{array}{r|rr} 2 & 2 & 8 \\ \hline 2 & 1 & 4 \\ \hline & 1 & 2 \end{array}$$

$$\text{LCM} = 2 \times 2 \times 2 = 8$$

$$\begin{aligned} \text{b. } & \frac{2}{3} - \frac{2}{9} \\ & = \frac{6-2}{9} = \frac{4}{9} \end{aligned}$$

$$\begin{array}{r|rr} 3 & 3 & 9 \\ \hline & 1 & 3 \end{array}$$

$$\text{LCM} = 3 \times 3 = 9$$

$$\text{f. } 2\frac{7}{8} - 1\frac{1}{4}$$

$$\begin{aligned} & = \frac{23}{8} - \frac{5}{4} \\ & = \frac{23-10}{8} = \frac{13}{8} = 1\frac{5}{8} \end{aligned}$$

$$\text{LCM of 4 and 8} = 8$$

$$\text{g. } 4\frac{1}{2} - \frac{3}{10}$$

$$\begin{aligned} & = \frac{9}{2} - \frac{3}{10} \\ & = \frac{45-3}{10} = \frac{42}{10} = \frac{21}{5} = 4\frac{1}{5} \end{aligned}$$

$$\text{LCM of 2 and 10} = 10$$