

Extra Hot

Exercise 3



1. Copy each of the following and complete :-

$$\begin{aligned} \text{(a)} \quad \frac{3}{4} + \frac{1}{3} \\ = \frac{9}{12} + \frac{4}{12} \\ = \frac{13}{12} = 1\frac{1}{12} \end{aligned}$$

$$\begin{aligned} \text{(b)} \quad \frac{4}{5} - \frac{2}{3} \\ = \frac{12}{15} - \frac{10}{15} \\ = \frac{2}{15} \end{aligned}$$

$$\begin{aligned} \text{(c)} \quad \frac{7}{8} - \frac{3}{4} \\ = \frac{7}{8} - \frac{6}{8} \\ = \frac{1}{8} \end{aligned}$$

$$\begin{aligned} \text{(d)} \quad \frac{6}{7} + \frac{2}{3} \\ = \frac{18}{21} + \frac{14}{21} \\ = \frac{32}{21} \end{aligned}$$

2. Show how to simplify the following :-

$$\text{(a)} \quad \frac{2}{3} + \frac{1}{5}$$

$$\text{(b)} \quad \frac{3}{4} - \frac{1}{2}$$

$$\text{(c)} \quad \frac{5}{8} + \frac{2}{3}$$

$$\text{(d)} \quad \frac{4}{5} + \frac{1}{2}$$

$$\text{(e)} \quad \frac{5}{6} - \frac{1}{3}$$

$$\text{(f)} \quad \frac{3}{4} - \frac{2}{3}$$

$$\text{(g)} \quad \frac{7}{10} + \frac{2}{5}$$

$$\text{(h)} \quad \frac{7}{9} - \frac{1}{2}$$

this is Chapter Thirty One

page 133

FRACTION CALCULATIONS

3. Show your working here :-

$$\text{(a)} \quad \frac{1}{2} + \frac{1}{3} + \frac{1}{4}$$

$$\text{(b)} \quad \frac{5}{6} - \frac{1}{2} - \frac{1}{3}$$

$$\text{(c)} \quad \frac{2}{3} + \frac{3}{5} - \frac{1}{2}$$

Mixed Fractions :- Deal with the **whole numbers first**, then the fractions.

Example 4

$$\begin{aligned} 2\frac{1}{2} + 3\frac{2}{3} \\ = 5(\frac{1}{2} + \frac{2}{3}) \\ = 5(\frac{3}{6} + \frac{4}{6}) \\ = 5\frac{7}{6} \\ = 6\frac{1}{6} \end{aligned}$$

Example 5

$$\begin{aligned} 7\frac{7}{8} - 4\frac{2}{3} \\ = 3(\frac{7}{8} - \frac{2}{3}) \\ = 3(\frac{21}{24} - \frac{16}{24}) \\ = 3\frac{5}{24} \end{aligned}$$

Example 6

$$\begin{aligned} 4\frac{3}{4} + \frac{5}{6} \\ = 4(\frac{3}{4} + \frac{5}{6}) \\ = 4(\frac{9}{12} + \frac{10}{12}) \\ = 4\frac{19}{12} \\ = 5\frac{7}{12} \end{aligned}$$

4. Copy and complete the following :-

$$\text{(a)} \quad 5\frac{1}{3} + 2\frac{1}{2}$$

$$\text{(b)} \quad 3\frac{3}{4} - 1\frac{1}{3}$$

$$\text{(c)} \quad 7\frac{7}{8} - 1\frac{1}{4}$$

$$\text{(d)} \quad 4\frac{1}{2} + 3\frac{3}{5}$$

$$\text{(e)} \quad 2\frac{5}{6} - 1\frac{1}{3}$$

$$\text{(f)} \quad 3\frac{2}{3} + 1\frac{5}{8}$$

$$\text{(g)} \quad 7\frac{1}{5} + 1\frac{1}{4}$$

$$\text{(h)} \quad 5\frac{9}{10} - 1\frac{1}{2}$$

$$\text{(i)} \quad 6\frac{1}{3} + \frac{7}{9}$$

$$\text{(j)} \quad 4\frac{4}{5} + 1\frac{3}{4}$$

$$\text{(k)} \quad 3\frac{1}{10} + 2\frac{2}{5}$$

$$\text{(l)} \quad 5\frac{1}{4} - 5\frac{1}{6}$$

5. Copy and complete the following :-

$$\text{(a)} \quad 6 - 2\frac{1}{3}$$

$$\text{(b)} \quad 5 - 3\frac{2}{5}$$

$$\text{(c)} \quad 10 - 7\frac{5}{8}$$

$$\text{(d)} \quad 4 - 3\frac{3}{5}$$

$$\begin{aligned} \text{(6-2)} \quad \rightarrow 4 - \frac{1}{3} \\ = 3\frac{2}{3} \end{aligned}$$

$$\begin{aligned} = 2 - \frac{2}{5} \\ = 1\frac{8}{5} \end{aligned}$$

$$\begin{aligned} = 3 - \frac{5}{8} \\ = 2\frac{1}{8} \end{aligned}$$

$$\begin{aligned} = 1 - \frac{3}{5} \\ = \frac{2}{5} \end{aligned}$$

6. Use the above method to find :-

$$\text{(a)} \quad 4 - 1\frac{1}{5}$$

$$\text{(b)} \quad 6 - 3\frac{4}{7}$$

$$\text{(c)} \quad 10 - 5\frac{5}{6}$$

$$\text{(d)} \quad 6 - 4\frac{3}{5}$$

$$\text{(e)} \quad 5 - 4\frac{7}{10}$$

$$\text{(f)} \quad 35 - 29\frac{3}{8}$$

$$\text{(g)} \quad 12 - 6\frac{5}{7}$$

$$\text{(h)} \quad 8 - 3\frac{1}{3}$$

