



Fractions Ex 6.9 Q1

Answer :

(i)

$$\frac{3}{4} + \frac{5}{6}$$

LCM of 4 & 6 is 12, so we will convert each fraction into an equivalent fraction with denominator 12.

$$\begin{aligned} &= \frac{3 \times 3}{4 \times 3} + \frac{5 \times 2}{6 \times 2} \\ &= \frac{9}{12} + \frac{10}{12} \\ &= \frac{9+10}{12} = \frac{19}{12} \end{aligned}$$

(ii)

$$\frac{7}{10} + \frac{2}{15}$$

LCM of 10 & 15 is 30, so we will convert each fraction into an equivalent fraction with denominator 30.

$$\begin{aligned} &= \frac{7 \times 3}{10 \times 3} + \frac{2 \times 2}{15 \times 2} = \frac{21}{30} + \frac{4}{30} \\ &= \frac{21+4}{30} \\ &= \frac{25}{30} \end{aligned}$$

(iii)

$$\frac{8}{13} + \frac{2}{3}$$

LCM of 13 & 3 is 39, so we convert each fraction into an equivalent fraction with denominator 39.

$$\begin{aligned} &= \frac{8 \times 3}{13 \times 3} + \frac{2 \times 13}{3 \times 13} = \frac{24}{39} + \frac{26}{39} \\ &= \frac{24+26}{39} \\ &= \frac{50}{39} \end{aligned}$$

(iv)

$$\frac{4}{5} + \frac{7}{15}$$

LCM of 5 & 15 is 15, so we will convert each fraction into an equivalent fraction with denominator 15.

$$\begin{aligned} &\frac{4 \times 3}{5 \times 3} + \frac{7 \times 1}{15 \times 1} = \frac{12}{15} + \frac{7}{15} \\ &= \frac{12+7}{15} = \frac{19}{15} \end{aligned}$$

Fractions Ex 6.9 Q2

Answer :

(i)

$$\frac{19}{21} - \frac{2}{7}$$

LCM of 21 & 7 is 21, so we convert each fraction into an equivalent fraction with denominator 21.

$$\begin{aligned} &= \frac{19 \times 1}{21 \times 1} - \frac{2 \times 3}{7 \times 3} = \frac{19}{21} - \frac{6}{21} \\ &= \frac{19-6}{21} = \frac{13}{21} \end{aligned}$$

(ii)

$$\frac{18}{20} - \frac{21}{25}$$

LCM of 20 & 25 is 100, so we convert each fraction into an equivalent fraction with denominator 100.

$$\begin{aligned} &= \frac{18 \times 5}{20 \times 5} - \frac{21 \times 4}{25 \times 4} = \frac{90}{100} - \frac{84}{100} \\ &= \frac{6}{100} \end{aligned}$$

(iii)

$$\frac{2}{1} - \frac{7}{16}$$

LCM of 1 & 16 is 16, so we convert each fraction into an equivalent fraction with denominator 16.

$$\begin{aligned} &= \frac{2 \times 16}{1 \times 16} - \frac{7 \times 1}{16 \times 1} = \frac{32}{16} - \frac{7}{16} \\ &= \frac{32-7}{16} \\ &= \frac{25}{16} \end{aligned}$$

(iv)

$$\begin{aligned} 2\frac{1}{5} - \frac{4}{15} &= \frac{(5 \times 2) + 1}{5} - \frac{4}{15} \\ &= \frac{11}{5} - \frac{4}{15} \end{aligned}$$

LCM of 5 & 15 is 15, so we convert each fraction into an equivalent fraction with denominator 15.

$$\begin{aligned} &\frac{11 \times 3}{5 \times 3} - \frac{4 \times 1}{15 \times 1} \\ \frac{33}{15} - \frac{4}{15} &= \frac{33-4}{15} \\ &= \frac{29}{15} \end{aligned}$$

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