Fractions Ex 6.9 Q3

Answer :

(i)

$$\frac{13}{24}-\frac{7}{16}$$

$$=\frac{13\times2}{24\times2}-\frac{7\times3}{16\times3} \qquad \left(\text{Because LCM of } 24 \text{ \& } 16 \text{ is } 48\right)$$

$$=\frac{26}{48}-\frac{21}{48}$$

$$=\frac{26-21}{48}=\frac{5}{48}$$

(ii)

$$\frac{5}{18}-\frac{4}{15}$$

$$=\frac{5\times5}{18\times5}-\frac{4\times6}{15\times6}$$

$$=\frac{25}{90}-\frac{24}{90} \qquad \left(\text{Because LCM of } 18 \text{ \& } 15 \text{ is } 90\right)$$

$$=\frac{25-24}{90}=\frac{1}{90}$$

(iii)

$$\frac{3}{4}-\frac{1}{12}$$

$$=\frac{3\times3}{4\times3}-\frac{1\times1}{12\times1} \qquad \left(\text{Because LCM of } 4 \text{ \& } 12 \text{ is } 12\right)$$

$$=\frac{9}{12}-\frac{1}{12}$$

$$=\frac{9-1}{12}=\frac{8}{12}$$

(iv)

$$\frac{6}{7}-\frac{2}{3}$$

$$=\frac{6\times3}{7\times3}-\frac{2\times7}{3\times7} \qquad \left(\text{Because LCM of } 7 \text{ \& } 3 \text{ is } 21\right)$$

$$=\frac{18}{21}-\frac{14}{21}$$

$$=\frac{18-14}{21}$$

$$=\frac{4}{21}$$

Fractions Ex 6.9 Q4

Answer :

(i) $\frac{8}{3} - \frac{5}{9}$

$= \frac{8\times3}{3\times3} - \frac{5\times1}{9\times1}$ (Because LCM of 3 & 9 is 9)

$= \frac{24}{9} - \frac{5}{9} = \frac{24-5}{9}$

$= \frac{19}{9}$

(ii) $4\frac{2}{5} - 2\frac{1}{5} = \frac{(5\times4)+2}{5} - \frac{(5\times2)+1}{5}$

$= \frac{22}{5} - \frac{11}{5} = \frac{22-11}{5}$

$= \frac{11}{5}$

(iii) $5\frac{6}{7} - 2\frac{2}{3} = \frac{(7\times5)+6}{7} - \frac{(3\times2)+2}{3}$

$= \frac{41}{7} - \frac{8}{3}$

$\frac{41\times3}{7\times3} - \frac{8\times7}{3\times7}$ (Because LCM of 7 & 3 is 21)

$\frac{123}{21} - \frac{56}{21} = \frac{123-56}{21}$

$= \frac{67}{21}$

(iv) $4\frac{3}{4} - 2\frac{1}{6} = \frac{(4\times4)+3}{4} - \frac{(6\times2)+1}{6}$

$= \frac{19}{4} - \frac{13}{6}$

$\frac{19\times3}{4\times3} - \frac{13\times2}{6\times2}$ (Because LCM of 4 & 6 is 12)

$= \frac{57}{21} - \frac{26}{21}$

$= \frac{57-26}{21}$

$= \frac{31}{12}$

********** END **********