Q8

Answer :

$3\frac{5}{8} - 2\frac{5}{12}$

$= \frac{29}{8} - \frac{29}{12}$

2	8, 12
2	4 , 6
2	2, 3
3	1, 3
	1, 1

L.C.M. of 8 and 12 $= \left(2 \times 2 \times 2 \times 3\right) = 24$

$\therefore \frac{29}{8} - \frac{29}{12} = \frac{(87 - 58)}{24} = \frac{29}{24} = 1\frac{5}{24}$

$\{[24 \div 8 = 3, 3 \times 29 = 87]$ and $[24 \div 12 = 2, 2 \times 29 = 58]\}$

Q9

Answer :

$2\frac{3}{10} - 1\frac{7}{15}$

$= \frac{23}{10} - \frac{22}{15}$

5	10, 15
2	2, 3
3	1, 3
	1, 1

L.C.M. of 10 and 15 $= \left(2 \times 3 \times 5\right) = 30$

$= \frac{(69 - 44)}{30}$

$\{[30 \div 10 = 3, 3 \times 23 = 69]$ and $[30 \div 15 = 2, 2 \times 22 = 44]\}$

$= \frac{25^{5}}{30_{6}}$

$= \frac{5}{6}$

Q10

Answer:

$6\frac{2}{3} - 3\frac{3}{4}$

$= \frac{20}{3} - \frac{15}{4}$ L.C.M. of 3 and 4 $= \left(2 \times 2 \times 3\right) = 12$

$= \frac{(80 - 45)}{12}$

$\{[12 \div 3 = 4, 4 \times 20 = 80] \text{ and } [12 \div 4 = 3, 3 \times 15 = 45]\}$

$= \frac{35}{12}$

$= 2\frac{11}{12}$

Q11

Answer:

$7 - 5\frac{2}{3}$

$= \frac{7}{1} - \frac{17}{3}$

L.C.M. of 1 and 3 $= 3$

$= \frac{(21 - 17)}{3}$

$\{[3 \div 1 = 3, 3 \times 7 = 21] \text{ and } [3 \div 3 = 1, 1 \times 17 = 17]\}$

$= \frac{4}{3} = 1\frac{1}{3}$

Q12

Answer:

$10 - 6\frac{3}{8}$

$= \frac{10}{1} - \frac{51}{8}$

L.C.M. of 1 and 8 $= 8$

$= \frac{(80 - 51)}{8}$

$\{[8 \div 1 = 8, 8 \times 10 = 80] \text{ and } [8 \div 8 = 1, 1 \times 51 = 51]\}$

$= \frac{29}{8}$

$= 3\frac{5}{8}$

Q13

Answer:

We have:

$\frac{5}{6} - \frac{4}{9} + \frac{2}{3}$

L.C.M. of 3, 6 and 9 $= (2 \times 3 \times 3) = 18$

$= \frac{(15 - 8 + 12)}{18}$

$\{[18 \div 6 = 3, 3 \times 5 = 15], [18 \div 9 = 2, 2 \times 4 = 8] \text{ and } [18 \div 3 = 6, 6 \times 2 = 12]\}$

$= \frac{(27 - 8)}{18}$

$$= \frac{19}{18}$$

$$= 1\frac{1}{18}$$

$$3 \,\big|\, 3, 6, 9$$

$$3 \,\big|\, 1, 2, 3$$

$$2 \mid \underline{1, 2, 1}$$

$$\mid \underline{1, 1, 1}$$

Q14

Answer:

We have:

$$\frac{5}{8} + \frac{3}{4} - \frac{7}{12}$$

$$2 \mid \underline{4, 8, 12}$$

$$2 \mid \underline{2, 4, 6}$$

$$2 \mid \underline{1, 2, 3}$$

$$3 \,\Big|\, \underline{1,\ 1,\ 3}$$

$$\Big|\, \underline{1,\ 1,\ 1}$$

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