



### Exercise 5F

$$\{[12 \div 4 = 3, 3 \times 23 = 69], [12 \div 12 = 1, 1 \times 53 = 53] \text{ and } [12 \div 6 = 2, 2 \times 19 = 38]\}$$

$$= \frac{(107-53)}{12} = \frac{54}{12} = \frac{9}{2} = 4\frac{1}{2}$$

Q17

**Answer :**

We have:

$$2 + 5\frac{7}{10} - 3\frac{14}{15}$$

$$= \frac{2}{1} + \frac{57}{10} - \frac{59}{15}$$

$$5 \overline{) 1, 10, 15}$$

$$2 \overline{) 1, 2, 3}$$

$$3 \overline{) 1, 1, 3}$$

$$\quad \overline{) 1, 1, 1}$$

$$\text{L. C. M. of 10 and 15} = (2 \times 5 \times 3) = 30$$

$$= \frac{(60 + 171 - 118)}{30}$$

$$\{[30 \div 1 = 30, 30 \times 2 = 60], [30 \div 10 = 3, 3 \times 57 = 171] \text{ and } [30 \div 15 = 2, 2 \times 59 = 118]\}$$

$$= \frac{(231-118)}{30} = \frac{113}{30} = 3\frac{23}{30}$$

Q18

**Answer :**

We have:

$$8 - 3\frac{1}{2} - 2\frac{1}{4}$$

$$= \frac{8}{1} - \frac{7}{2} - \frac{9}{4}$$

$$2 \overline{) 1, 2, 4}$$

$$2 \overline{) 1, 1, 2}$$

$$\quad \overline{) 1, 1, 1}$$

$$\text{L. C. M. of 1, 2 and 4} = (2 \times 2) = 4$$

$$= \frac{(32 - 14 - 9)}{4}$$

$$\{[4 \div 1 = 4, 4 \times 8 = 32], [4 \div 2 = 2, 2 \times 7 = 14] \text{ and } [4 \div 4 = 1, 1 \times 9 = 9]\}$$

$$= \frac{(32-23)}{4} = \frac{9}{4} = 2\frac{1}{4}$$

Q19

**Answer :**

We have:

$$8\frac{5}{6} - 3\frac{3}{8} + 2\frac{7}{12}$$

$$= \frac{53}{6} - \frac{27}{8} + \frac{31}{12}$$

$$2 \overline{) 6, 8, 12}$$

$$2 \overline{) 3, 4, 6}$$

$$3 \overline{) 3, 2, 3}$$

$$2 \overline{) 1, 2, 1}$$

$$\overline{) 1, 1, 1}$$

$$\text{L.C.M. of 6, 8 and 12} = \left( 2 \times 2 \times 2 \times 3 \right) = 24$$

$$= \frac{(212-81+62)}{24}$$

$$\{[24 \div 6 = 4, 4 \times 53 = 212], [24 \div 8 = 3, 3 \times 27 = 81] \text{ and } [24 \div 12 = 2, 2 \times 31 =$$

$$= \frac{(274-81)}{24} = \frac{193}{24} = 8\frac{1}{24}$$

Q20

**Answer :**

We have:

$$6\frac{1}{6} - 5\frac{1}{5} + 3\frac{1}{3}$$

$$= \frac{37}{6} - \frac{26}{5} + \frac{10}{3}$$

$$2 \overline{) 6, 5, 3}$$

$$3 \overline{) 3, 5, 3}$$

$$5 \overline{) 1, 5, 1}$$

$$\overline{) 1, 1, 1}$$

$$\text{L.C.M. of 6, 5 and 3} = \left( 2 \times 5 \times 3 \right) = 30$$

$$= \frac{(185-156+100)}{30}$$

\*\*\*\*\* END \*\*\*\*\*