



Exercise 2A

$$\begin{aligned}
 &= \left(15 \frac{3}{4} + 12 \frac{1}{2} + 15 \frac{3}{4} + 12 \frac{1}{2} \right) \text{ cm} \\
 &= \left(\frac{63}{4} + \frac{25}{2} + \frac{63}{4} + \frac{25}{2} \right) \text{ cm} \\
 &= \left(\frac{63 + 50 + 63 + 50}{4} \right) \text{ cm} \quad [\because \text{LCM of 2 and 4} = 4] \\
 &= \left(\frac{226}{4} \right) \text{ cm} = \left(\frac{113}{2} \right) \text{ cm} = 56 \frac{1}{2} \text{ cm}
 \end{aligned}$$

Hence, the perimeter of ABCD is $56 \frac{1}{2} \text{ cm}$.

Solution 10

Answer :

$$\text{Actual width of the picture} = 7 \frac{3}{5} \text{ cm} = \frac{38}{5} \text{ cm}$$

$$\text{Required width of the picture} = 7 \frac{3}{10} \text{ cm} = \frac{73}{10} \text{ cm}$$

$$\begin{aligned}
 \therefore \text{Extra width} &= \left(\frac{38}{5} - \frac{73}{10} \right) \text{ cm} \\
 &= \left(\frac{76 - 73}{10} \right) \text{ cm} \quad [\because \text{LCM of 5 and 10 is 10}] \\
 &= \frac{3}{10} \text{ cm}
 \end{aligned}$$

Hence, the width of the picture should be trimmed by $\frac{3}{10} \text{ cm}$.

Solution 11

Answer :

$$\text{Required number to be added} = 18 - 7 \frac{3}{5}$$

$$= \frac{18}{1} - \frac{38}{5}$$

$$= \frac{90 - 38}{5} \quad [\because \text{LCM of 1 and 5} = 5]$$

$$= \frac{52}{5} = 10 \frac{2}{5}$$

Hence, the required number is $10 \frac{2}{5}$.

Solution 12

Answer :

$$\text{Required number to be added} = 8\frac{2}{5} - 7\frac{4}{15}$$

$$= \frac{42}{5} - \frac{109}{15}$$

$$= \frac{126-109}{15} \quad [\because \text{LCM of 5 and 15} = 15]$$

$$= \frac{17}{15} = 1\frac{2}{15}$$

Hence, the required number should be $1\frac{2}{15}$.

Solution 13

Answer :

$$\text{Required length of other piece of wire} = \left(3\frac{3}{4} - 1\frac{1}{2}\right)\text{m}$$

$$= \left(\frac{15}{4} - \frac{3}{2}\right)\text{m}$$

$$= \left(\frac{15-6}{4}\right)\text{m} \quad [\because \text{LCM of 4 and 2} = 4]$$

$$= \frac{9}{4}\text{m} = 2\frac{1}{4}\text{m}$$

Hence, the length of the other piece of wire is $2\frac{1}{4}\text{m}$.

Solution 14

Answer :

$$\begin{aligned}
 \text{Actual duration of the film} &= \left(3\frac{2}{3} - 1\frac{1}{2}\right) \text{ hours} \\
 &= \left(\frac{11}{3} - \frac{3}{2}\right) \text{ hours} \\
 &= \left(\frac{22-9}{6}\right) \text{ hours} \quad [\because \text{LCM of 3 and 2} = 6] \\
 &= \frac{13}{6} \text{ hours} = 2\frac{1}{6} \text{ hours}
 \end{aligned}$$

Hence, the actual duration of the film was $2\frac{1}{6}$ hours.

Solution 15

Answer :

First we have to compare the fractions: $\frac{2}{3}$ and $\frac{5}{9}$.

By cross multiplication, we have:

$$2 \times 9 = 18 \text{ and } 5 \times 3 = 15$$

However, $18 > 15$

$$\therefore \frac{2}{3} > \frac{5}{9}$$

So, $\frac{2}{3}$ is larger than $\frac{5}{9}$.

$$\text{Now, } \frac{2}{3} - \frac{5}{9}$$

$$= \frac{6-5}{9} \quad [\because \text{LCM of 3 and 9} = 9]$$

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

Hence, $\frac{2}{3}$ is $\frac{1}{9}$ part more than $\frac{5}{9}$.

Solution 16

Answer :

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