

# Vidya Bhawan, Balika Vidyapith, Lakhisarai

Class:-VI Subject:-Mathematics Date:-01-02-22

Subject Teacher:-Prabhat Ranjan

## Question 4:

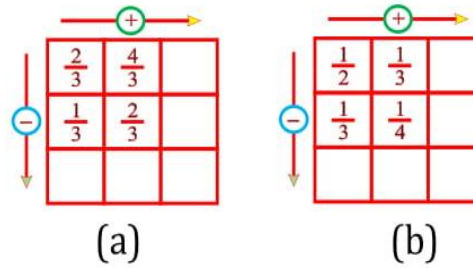
Fill in the boxes: (a)  $\square - \frac{5}{8} = \frac{1}{4}$  (b)  $\square - \frac{1}{5} = \frac{1}{2}$  (c)  $\frac{1}{2} - \square = \frac{1}{6}$

## Answer 4:

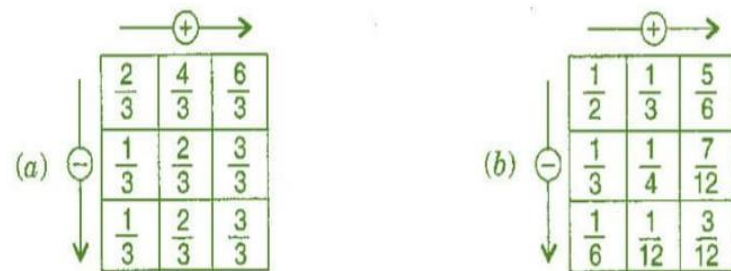
$$(a) \frac{1}{4} + \frac{5}{8} = \frac{2+5}{8} = \frac{7}{8} \quad (b) \frac{1}{2} + \frac{1}{5} = \frac{5+2}{10} = \frac{7}{10} \quad (c) \frac{1}{2} - \frac{1}{6} = \frac{3-1}{6} = \frac{2}{6}$$

## Question 5:

Complete the addition - subtraction box:



## Answer 5:



## Question 6:

A piece of wire  $\frac{7}{8}$  meter long broke into two pieces. One piece was  $\frac{1}{4}$  meter long. How long is the other piece?

## Answer 6:

$$\begin{aligned} \text{Total length of wire} &= \frac{7}{8} \text{ meter} \\ \text{Length of first part} &= \frac{1}{4} \text{ meter} \\ \text{Remaining part} &= \frac{7}{8} - \frac{1}{4} = \frac{7 \times 1 - 2 \times 1}{8} \quad [\because \text{L.C.M. of 8 and 4 is 8}] \\ &= \frac{7-2}{8} = \frac{5}{8} \text{ meter} \end{aligned}$$

Therefore, the length of remaining part is  $\frac{5}{8}$  meter.

## Question 7:

Nandini house is  $\frac{9}{10}$  km from her school. She walked some distance and then took a bus for  $\frac{1}{2}$  km to reach the school. How far did she walk?

## Answer 7:

$$\text{Total distance between school and house} = \frac{9}{10} \text{ km}$$

$$\begin{aligned} \text{Distance covered by bus} &= \frac{1}{2} \text{ km} \\ \text{Remaining distance} &= \frac{9}{10} - \frac{1}{2} = \frac{9 \times 1 - 1 \times 5}{10} \quad [\because \text{L.C.M. of 10 and 2 is 10}] \\ &= \frac{9-5}{10} = \frac{4}{10} = \frac{2}{5} \text{ km} \end{aligned}$$

Therefore, the distance covered by walking is  $\frac{2}{5}$  km.

### Question 8:

Asha and Samuel have bookshelves of the same size partly filled with books. Asha's shelf is  $\frac{5}{6}$ th full and Samuel's shelf is  $\frac{2}{5}$ th full. Whose bookshelf is more full? By what fraction?

### Answer 8:

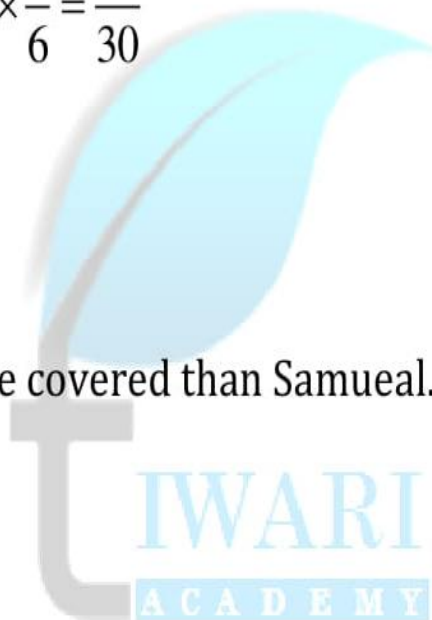
$$\begin{aligned} &\frac{5}{6} \text{ and } \frac{2}{5} \\ \Rightarrow &\frac{5}{6} \times \frac{5}{5} = \frac{25}{30} \text{ and } \frac{2}{5} \times \frac{6}{6} = \frac{12}{30} \quad [\because \text{L.C.M. of 6 and 5 is 30}] \end{aligned}$$

$$\therefore \frac{25}{30} > \frac{12}{30}$$

$$\Rightarrow \frac{5}{6} > \frac{2}{5}$$

$\therefore$  Asha's bookshelf is more covered than Samuel's.

$$\text{Difference} = \frac{25}{30} - \frac{12}{30} = \frac{13}{30}$$



### Question 9:

Jaidev takes  $2\frac{1}{5}$  minutes to walk across the school ground. Rahul takes  $\frac{7}{4}$  minutes to do same. Who takes less time and by what fraction?

### Answer 9:

$$\text{Time taken by Jaidev} = 2\frac{1}{5} \text{ minutes} = \frac{11}{5} \text{ minutes}$$

$$\text{Time taken by Rahul} = \frac{7}{4} \text{ minutes}$$

$$\begin{aligned} \text{Difference} &= \frac{11}{5} - \frac{7}{4} = \frac{11 \times 4 - 7 \times 5}{20} \quad [\because \text{L.C.M. of 5 and 4 is 20}] \\ &= \frac{44 - 35}{20} = \frac{9}{20} \text{ minutes} \end{aligned}$$

Thus, Rahul takes less time, which is  $\frac{9}{20}$  minutes.

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