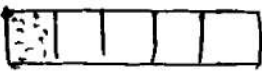
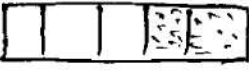
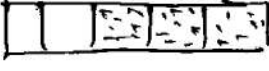


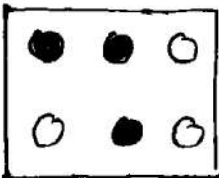
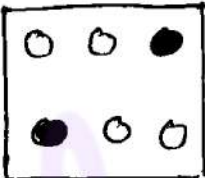
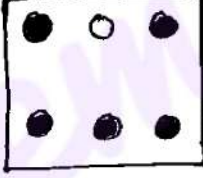
Exercise 6.8

Q.1 Write these fractions appropriately as additions or subtractions:

(i)  +  = 

Sol: $\frac{1}{5} + \frac{2}{5} = \frac{3}{5}$

$\therefore \frac{1}{5} + \frac{2}{5} = \frac{3}{5}$

(ii)  +  = 

$\frac{3}{6} + \frac{2}{6} = \frac{5}{6}$

$\therefore \frac{3}{6} + \frac{2}{6} = \frac{5}{6}$

Q.2 Solve:

(i) $\frac{5}{12} + \frac{1}{12}$

(ii) $\frac{3}{15} + \frac{7}{15}$

(iii) $\frac{3}{22} + \frac{7}{22}$

(iv) $\frac{1}{4} + \frac{0}{4}$

(v) $\frac{4}{13} + \frac{2}{13} + \frac{1}{13}$

(vi) $\frac{7}{31} - \frac{4}{31} + \frac{9}{31}$

(vii) $\frac{0}{15} + \frac{2}{15} + \frac{1}{15}$

(viii) $3\frac{2}{7} + \frac{1}{7} - 2\frac{3}{7}$

(ix) $2\frac{1}{3} - 1\frac{2}{3} + 4\frac{1}{3}$

(x) $1 - \frac{2}{3} + \frac{7}{3}$

(xi) $\frac{16}{7} - \frac{5}{7} + \frac{9}{7}$

Solution: (i) $\frac{5}{12} + \frac{1}{12} = \frac{5+1}{12} = \frac{6}{12} = \frac{1}{2}$

(ii) $\frac{3}{15} + \frac{7}{15} = \frac{3+7}{15} = \frac{10}{15} = \frac{2}{3}$

(iii) $\frac{3}{22} + \frac{7}{22} = \frac{3+7}{22} = \frac{10}{22} = \frac{5}{11}$

(iv) $\frac{1}{4} + \frac{0}{4} = \frac{1+0}{4} = \frac{1}{4}$

(v) $\frac{4}{13} + \frac{2}{13} + \frac{1}{13} = \frac{4+2+1}{13} = \frac{7}{13}$

(vi) $\frac{0}{15} + \frac{2}{15} + \frac{1}{15} = \frac{0+2+1}{15} = \frac{3}{15} = \frac{1}{5}$

(vii) $\frac{7}{31} - \frac{4}{31} + \frac{9}{31}$

$= \frac{7-4+9}{31}$

$= \frac{9-3}{31} = \frac{6}{31}$

(viii) $3\frac{2}{7} + \frac{1}{7} - 2\frac{3}{7}$

$= \frac{23}{7} + \frac{1}{7} - \frac{17}{7}$

$= \frac{23+1-17}{7} = \frac{24-17}{7} = \frac{7}{7} = 1$

$$(1x) \quad 2\frac{1}{3} - 1\frac{2}{3} + 4\frac{1}{3}$$

$$= \frac{7}{3} - \frac{5}{3} + \frac{13}{3}$$

$$= \frac{7-5+13}{3} = \frac{13+2}{3} = \frac{15}{3} = 5$$

$$(x) \quad 1 - \frac{2}{3} + \frac{7}{3}$$

$$= \frac{1 \times 3}{1 \times 3} - \frac{2}{3} + \frac{7}{3}$$

$$= \frac{3}{3} - \frac{2}{3} + \frac{7}{3} = \frac{3-2+7}{3} = \frac{1+7}{3} = \frac{8}{3}$$

$$(x1) \quad \frac{16}{7} - \frac{5}{7} + \frac{9}{7}$$

$$= \frac{16-5+9}{7} = \frac{11+9}{7}$$

$$= \frac{20}{7}$$

Q.3 Shikha painted $\frac{1}{5}$ of the wall space in her room. Her brother Ravish helped and painted $\frac{3}{5}$ of the wall space. How much did they paint together. How much the room left unpainted?

Solution! Portion painted by Shikha = $\frac{1}{5}$

Portion painted by Ravish = $\frac{3}{5}$

$$\begin{aligned}\therefore \text{Portion of wall painted together} &= \frac{1}{5} + \frac{3}{5} \\ &= \frac{1+3}{5} \\ &= \frac{4}{5}\end{aligned}$$

$\therefore$ Shikha and Ravish painted $\frac{4}{5}$ portion together

$$\begin{aligned}\text{Now Portion left unpainted} &= 1 - \frac{4}{5} \\ &= \frac{5}{5} - \frac{4}{5} = \frac{5-4}{5} \\ &= \frac{1}{5}\end{aligned}$$

Thus $\frac{1}{5}$ portion left unpainted.

Q.4 Ramesh bought $2\frac{1}{2}$ kg sugar whereas Rohit bought $3\frac{1}{2}$ kg of sugar. Find the total amount of sugar bought by both of them.

$$\begin{aligned}\text{Solution! Total Amount of Sugar} &= 3\frac{1}{2} + 2\frac{1}{2} \\ &= \frac{7}{2} + \frac{5}{2} = \frac{7+5}{2} \\ &= \frac{12}{2} = 6 \text{ Kg.}\end{aligned}$$

$\therefore$ Total Amount of Sugar = 6 Kg.

Q.5 The teacher taught $\frac{3}{5}$ of the book, Vivek revised $\frac{1}{5}$ more on his own. How much does he still have to revise?

Solution: Fraction of book teacher taught = $\frac{3}{5}$

fraction of book Vivek revised = $\frac{1}{5}$

$\therefore$ Part of book, Vivek still have to revise

$$= \frac{3}{5} - \frac{1}{5} = \frac{3-1}{5}$$

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

Hence, Vivek still have to revise $\frac{2}{5}$ of the book.

Q.6 Anit was given $\frac{5}{7}$ of a bucket of oranges.

What fraction of oranges was left in the basket?

Solution: Fraction of oranges Anit has = $\frac{5}{7}$

So, fraction of oranges left in basket

$$= 1 - \frac{5}{7}$$

$$\Rightarrow \frac{7}{7} - \frac{5}{7} = \frac{7-5}{7}$$

$$= \frac{2}{7}$$

Hence, the fraction of oranges left in the basket = $\frac{2}{7}$

Q.7 Fill the missing fractions:

$$(i) \frac{7}{10} - \square = \frac{3}{10}$$

$$(ii) \square - \frac{3}{21} = \frac{5}{21}$$

$$(iii) \square - \frac{3}{6} = \frac{3}{6}$$

$$(iv) \square - \frac{5}{27} = \frac{12}{27}$$

Solution! (i) $\frac{7}{10} - \square = \frac{3}{10}$

$$\text{So, } \square = \frac{7}{10} - \frac{3}{10} = \frac{4}{10} = \frac{2}{5}$$

$$\therefore \square = \frac{2}{5}$$

$$(ii) \square - \frac{3}{21} = \frac{5}{21}$$

$$\therefore \square = \frac{5}{21} + \frac{3}{21} = \frac{5+3}{21} = \frac{8}{21}$$

$$(iii) \square - \frac{3}{6} = \frac{3}{6}$$

$$\therefore \square = \frac{3}{6} + \frac{3}{6} = \frac{6}{6} = 1$$

$$(iv) \square - \frac{5}{27} = \frac{12}{27}$$

$$\therefore \square = \frac{12}{27} + \frac{5}{27}$$

$$= \frac{12+5}{27} = \frac{17}{27}$$

$$\therefore \square = \frac{17}{27}$$