

**RD SHARMA**

**Solutions**

**Class 6 Maths**

**Chapter 6**

**Ex 6.8**

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

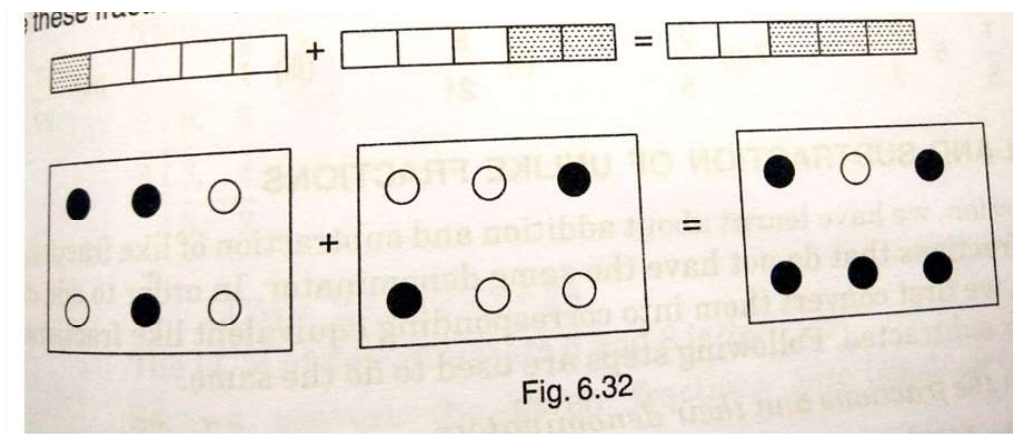


Fig. 6.32

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

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

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

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

Sol :

i) The given fractions are:

$$\frac{5}{12} + \frac{1}{12} = \frac{1+5}{12} = \frac{6}{12} = \frac{1}{2}$$

Hence the answer is  $\frac{1}{2}$

ii) The given fractions are:

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

Hence the answer is  $\frac{5}{6}$

iii) the given fractions are :

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

Hence the answer is  $\frac{5}{11}$

iv) the given fractions are :

$$\frac{1}{4} + \frac{0}{4} = \frac{1+0}{4} = \frac{1}{4}$$

Hence the answer is  $\frac{1}{4}$

v) The given fractions are :

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

Hence the answer is  $\frac{7}{13}$

vi) the given fractions are :

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

Hence the answer is  $\frac{1}{5}$

vii) the given fractions are :

$$\frac{7}{31} - \frac{4}{31} + \frac{9}{31}$$
$$= \frac{7-4+9}{31} = \frac{12}{31}$$

Hence the answer is  $\frac{12}{31}$

viii) the given fractions are :

$$3\frac{2}{7} + \frac{1}{7} - 2\frac{3}{7}$$
$$= \frac{23+1-17}{7} = \frac{7}{7} = \frac{1}{1} = 1$$

Hence the answer is  $\frac{1}{1} = 1$

ix) the given fractions are :

$$3\frac{2}{7} + \frac{1}{7} - 2\frac{3}{7}$$
$$= \frac{23+1-17}{7} = \frac{35}{7} = \frac{5}{1} = 5$$

Hence the answer is  $\frac{5}{1} = 5$

x) the given fractions are :

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

Hence the answer is  $\frac{8}{3}$

xi) the given fractions are :

$$\frac{16}{7} - \frac{5}{7} + \frac{9}{7}$$
$$= \frac{16-5+9}{7} = \frac{20}{7}$$

Hence the answer is  $\frac{20}{7}$

**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 is left unpainted?**

**Sol :**

Shikha painted  $\frac{1}{5}$  of the wall space in her room

Ravish painted  $\frac{3}{5}$  of the wall space

Wall space painted by both of them together =  $\frac{1}{5} + \frac{3}{5} = \frac{1+3}{5} = \frac{4}{5}$

Unpainted part of the room =  $1 - \frac{4}{5} =$

$$\frac{5-4}{5} = \frac{1}{5}$$

**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.**

**Sol :**

Quantity of sugar bought by ramesh =  $2\frac{1}{2}$  kg

$$= \frac{(2 \times 2) + 1}{2} = \frac{5}{2} \text{ kg}$$

Quantity of sugar bought by rohit =  $3\frac{1}{2}$  kg

$$= \frac{(2 \times 3) + 1}{2} = \frac{7}{2} \text{ kg}$$

Total amount of sugar bought by them :

Quantity of sugar bought by rohit + Quantity of sugar bought by ramesh

$$= \frac{5}{2} \text{ kg} + \frac{7}{2} \text{ kg}$$

$$= 6 \text{ kg (Dividing numerator and denominator by their HCF (6))}$$

**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 ?**

**Sol :**

Fraction of the book taught by the teacher =  $\frac{3}{5}$

Fraction of the book revised by vivek =  $\frac{1}{5}$

Fraction of the book still left for revision by vivek :

$$\frac{3}{5} - \frac{1}{5} = \frac{3-1}{5} = \frac{2}{5}$$

Therefore, Fraction of the book still left for revision by vivek is  $\frac{2}{5}$

**Q 6. Amit was given  $\frac{5}{7}$  of a bucket of oranges. What fraction of oranges was left in the basket ?**

**Sol :**

Fraction of oranges given to amit =  $\frac{5}{7}$

Fraction of oranges left in the basket :

$$1 - \frac{5}{7} = \frac{7-5}{7} = \frac{2}{7}$$

Therefore, Fraction of oranges left in the basket is  $\frac{2}{7}$

**Q 7. Fill in the missing fractions :**

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

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

iii)  $\frac{*}{*} - \frac{3}{6} = \frac{3}{6}$

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

**sol :**

i) Given :

$$\frac{7}{10} - \frac{*}{*} = \frac{3}{10}$$

$$\frac{7}{10} - \frac{3}{10} = \frac{*}{*}$$

$$\frac{7-3}{10} = \frac{2}{5}$$

Therefore,

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

ii) Given :

$$\frac{*}{*} - \frac{3}{21} = \frac{5}{21}$$

$$\frac{*}{*} = -\frac{3}{21} + \frac{5}{21}$$

$$\frac{5-3}{21} = \frac{2}{21}$$

Therefore,

$$\frac{*}{*} = \frac{2}{21}$$

iii) Given :

$$\frac{*}{*} - \frac{3}{6} = \frac{3}{6}$$

$$\frac{*}{*} = \frac{3}{6} + \frac{3}{6}$$

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

Therefore,

$$\frac{*}{*} = \frac{6}{6} = \frac{1}{1} = 1$$

iv) Given :

$$\frac{*}{*} - \frac{5}{27} = \frac{12}{27}$$

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

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

Therefore,

$$\frac{*}{*} = \frac{17}{27}$$