

Fractions Ex 6.8 Q1

Answer:

(i) The given fractions are $\frac{1}{5}$ & $\frac{2}{5}$

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

(ii) The given fractions are $\frac{3}{6}$ & $\frac{2}{6}$

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

Fractions Ex 6.8 Q2

Answer

$$\begin{split} &\text{(i)} \frac{5}{12} + \frac{1}{12} = \frac{5+1}{12} \\ &= \frac{6 \div 6}{12 \div 6} = \frac{1}{2} \quad \Big(\text{Dividing numerator \& denominator by their HCF} \Big) \end{split}$$

$$\begin{aligned} &\text{(ii)} \frac{3}{15} + \frac{7}{15} = \frac{3+7}{15} \\ &= \frac{10 \div 5}{15 \div 5} = \frac{2}{3} \end{aligned} \qquad \text{(Dividing numerator & denominator by their HCF)}$$

$$\begin{split} &(\mathrm{iii})\frac{3}{22}+\frac{7}{22}=\frac{3+7}{22} \\ &=\frac{10\div2}{22\div2}=\frac{5}{11} \quad \ \Big(\mathrm{Dividing\ numerator\ \&\ denominator\ by\ their\ HCF} \Big) \end{split}$$

$$\begin{array}{l} \text{(iV)} \frac{1}{4} + \frac{0}{4} = \frac{1+0}{4} = \frac{1}{4} \\ \text{(V)} \frac{4}{13} + \frac{2}{13} + \frac{1}{13} = \frac{4+2+1}{13} = \frac{7}{13} \end{array}$$

$$\begin{array}{l} \text{(vi)} \frac{0}{15} + \frac{2}{15} + \frac{1}{15} = \frac{0+2+1}{15} \\ = \frac{3\div 3}{15\div 3} = \frac{1}{5} \end{array} \qquad \left(\text{Dividing numerator \& denominator by their HCF} \right)$$

$$(\mathrm{VII})\frac{7}{31} - \frac{4}{31} + \frac{9}{31} = \frac{7 - 4 + 9}{31} = \frac{12}{31}$$

$$\begin{array}{l} \text{(viii)} 3\,\frac{2}{7}+\frac{1}{7}-2\,\frac{3}{7}=\frac{23}{7}+\frac{1}{7}-\frac{17}{7}=\frac{23+1-17}{7}=\frac{7}{7}=1\\ \text{(ix)} 2\,\frac{1}{3}-1\,\frac{2}{3}+4\,\frac{1}{3}=\frac{7}{3}-\frac{5}{3}+\frac{13}{3}\\ =\frac{7-5+13}{3}=\frac{15\div3}{3\div3}=5 \qquad \left(\text{Dividing numerator \& denominator by their HCF} \right) \end{array}$$

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

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

Fractions Ex 6.8 Q3

Answer:

Shikha painted $\frac{1}{5}$ of the wall space.

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

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