Fractions Ex 6.5 Q4

Answer :

(i)

$\frac{3}{5} = \frac{9}{\quad}$

Consider the numerators.

As $3 \times 3 = 9$, we will multiply both the numerator & denominator by 3.

$\Rightarrow \frac{3}{5} \times \frac{3}{3} = \frac{9}{15}$

(ii)

$\frac{3}{5} = \frac{\quad}{30}$

Consider the denominators.

As $5 \times 6 = 30$, we will multiply both the numerator & denominator by 6.

$\Rightarrow \frac{3}{5} \times \frac{6}{6} = \frac{18}{30}$

(iii)

$\frac{3}{5} = \frac{21}{\quad}$

Consider the numerators.

As $3 \times 7 = 21$, we will multiply both the numerator & denominator by 7.

$\Rightarrow \frac{3}{5} \times \frac{7}{7} = \frac{21}{35}$

(iv)

$\frac{3}{5} = \frac{\quad}{40}$

Consider the denominators.

As $5 \times 8 = 40$, we will multiply both the numerator & denominator by 8.

$\Rightarrow \frac{3}{5} \times \frac{8}{8} = \frac{24}{40}$

Fractions Ex 6.5 Q5

Answer :

(i)

$\frac{45}{60} = \frac{15}{\text{Denominator}}$

We will consider the numerators.

As $45 \div 3 = 15$, we will divide both the numerator & denominator by 3.

$\Rightarrow \left(\frac{\frac{45}{3}}{\frac{60}{3}}\right) = \frac{15}{20}$

(ii)

$\frac{45}{60} = \frac{\text{Numerator}}{4}$

We will consider the denominators.

As $60 \div 15 = 4$, we will multiply both the numerator & denominator by 15.

$\Rightarrow \left(\frac{\frac{45}{15}}{\frac{60}{15}}\right) = \frac{3}{4}$

(iii)

$\frac{45}{60} = \frac{\text{Numerator}}{240}$

We will consider the denominators.

As $60 \times 4 = 240$, we will multiply both the numerator & denominator by 4.

$\Rightarrow \frac{45}{60} \times \frac{4}{4} = \frac{180}{240}$

(iv)

$\frac{45}{60} = \frac{135}{\text{Denominator}}$

We will consider the numerators.

As $45 \times 3 = 135$, we will multiply both the numerator & denominator by 3.

$\Rightarrow \frac{45}{60} \times \frac{3}{3} = \frac{135}{180}$

Fractions Ex 6.5 Q6

Answer :

Firstly, we will reduce $\frac{35}{42}$ into the lowest term.

Now, we will divide both the numerator & denominator by the HCFs of 35 & 42.

$\Rightarrow \frac{35 \div 7}{42 \div 7} = \frac{5}{6}$

$\left(\text{i}\right)\ \frac{5}{6} = \frac{15}{\text{Denominator}}$

We will consider the numerators.

As $5 \times 3 = 15$, we will multiply both the numerator & denominator by 3.

$\Rightarrow \frac{5\times3}{6\times3} = \frac{15}{18}$

$\left(\text{ii}\right)\ \frac{5}{6} = \frac{\text{Numerator}}{18}$

We will consider the denominators.

As $6 \times 3 = 18$, we will multiply both the numerator & denominator by 3.

$\Rightarrow \frac{5\times3}{6\times3} = \frac{15}{18}$

$\left(iii\right)\ \frac{5}{6} = \frac{\text{numerator}}{30}$

We will consider the denominators ,

Since, $6 \times 5 = 30$, therefore multiplying both the numerator & denominator by 5

$\Rightarrow\ \frac{5\times5}{6\times5} = \frac{25}{30}$

$\left(\text{iv}\right)\ \frac{5}{6} = \frac{30}{\text{Denominator}}$

We will consider the numerators.

As $5 \times 6 = 30$, we will multiply both the numerator & denominator by 6.

$\Rightarrow \frac{5\times6}{6\times6} = \frac{30}{36}$

********** END **********