Fractions Ex 2.3 Q1

Answer :

Reciprocal of a non-zero fraction $\frac{a}{b}$ is $\frac{b}{a}$

(i)

Reciprocal of $\frac{3}{7}$ is $\frac{7}{3}$

It's improper fraction because numerator is greater than denominator

(ii)

Reciprocal of $\frac{5}{8}$ is $\frac{8}{5}$

It's improper fraction because numerator is greater than denominator

(iii)

Reciprocal of $\frac{9}{7}$ is $\frac{7}{9}$

It's proper fraction because numerator is less than denominator

(iv)

Reciprocal of $\frac{6}{5}$ is $\frac{5}{6}$

It's proper fraction because numerator is less than denominator

(v)

Reciprocal of $\frac{12}{7}$ is $\frac{7}{12}$

It's proper fraction because numerator is less than denominator

(vi)

Reciprocal of $\frac{1}{8}$ is $\frac{8}{1} = 8$

It is a whole number

Fractions Ex 2.3 Q2

Answer :

(i)

$$\frac{3}{8} \div \frac{5}{9} = \frac{3}{8} \times \frac{9}{5}$$

$$\Rightarrow \frac{3 \times 9}{8 \times 5} \Leftrightarrow \frac{27}{40}$$

(ii)

$$3\frac{1}{4} \div \frac{2}{3} = \frac{(3 \times 4)+1}{4} \times \frac{3}{2}$$

$$\Rightarrow \frac{13}{4} \times \frac{3}{2} \Leftrightarrow \frac{39}{8} = 4\frac{7}{8}$$

(iii)

$$\frac{7}{8} \div 4\frac{1}{2} = \frac{7}{8} \div \frac{(4 \times 2)+1}{2}$$

$$\Rightarrow \frac{7}{\cancel{8}} \times \frac{\cancel{2}}{9}$$

$$\Rightarrow \frac{7}{4} \times \frac{1}{9} \Leftrightarrow \frac{7}{36}$$

(iv)

$$6\frac{1}{4} \div 2\frac{3}{5} = \frac{(6 \times 4)+1}{4} \div \frac{(2 \times 5)+3}{5}$$

$$\Rightarrow \frac{25}{4} \div \frac{13}{5} = \frac{25}{4} \times \frac{5}{13}$$

$$\Rightarrow \frac{125}{52} = 2\frac{21}{52}$$

Answer :

(i)

$$\frac{3}{8} \div 4 = \frac{3}{8} \times \frac{1}{4}$$

$$= \frac{3}{32}$$

(ii)

$$\frac{9}{16} \div 6 = \frac{9}{16} \times \frac{1}{6} = \frac{\cancel{9}^{3}}{16 \times \cancel{6}^{2}}$$

$$= \frac{3}{32}$$

(iii)

$$9 \div \frac{3}{16} = \frac{9}{1} \times \frac{16}{3} \Leftrightarrow \frac{\cancel{9}^{3} \times 16}{\cancel{3}}$$

$$= 48$$

(iv)

$$10 \div \frac{100}{3} = \frac{10}{1} \times \frac{3}{100} \Leftrightarrow \frac{\cancel{10} \times 3}{\cancel{100}^{10}}$$

$$= \frac{3}{10}$$

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