Exercise 2C

01

Answer :

(i) Reciprocal of $\frac{5}{8}$ = $\frac{8}{5}$ $[\because \frac{5}{8} \times \frac{8}{5} = 1]$

(ii) Reciprocal of 7 = $\frac{1}{7}$ $[\because 7 \times \frac{1}{7} = 1]$

(iii) Reciprocal of $\frac{1}{12}$ = 12 $[\because \frac{1}{12} \times 12 = 1]$

(iv) Reciprocal of $12\frac{3}{5}$ = Reciprocal of $\frac{63}{5}$ = $\frac{5}{63}$ $[\because \frac{63}{5} \times \frac{5}{63} = 1]$

02

Answer :

(i) $\frac{4}{7} \div \frac{9}{14} = \frac{4}{7} \times \frac{14}{9}$ $[\because$ Reciprocal of $\frac{9}{14} = \frac{14}{9}]$

$= \frac{8}{9}$

(ii) $\frac{7}{10} \div \frac{3}{5} = \frac{7}{10} \times \frac{5}{3}$ $[\because$ Reciprocal of $\frac{3}{5} = \frac{5}{3}]$

$= \frac{7}{6} = 1\frac{1}{6}$

(iii) $\frac{8}{9} \div 16 = \frac{8}{9} \times \frac{1}{16}$ $[\because$ Reciprocal of $16 = \frac{1}{16}]$

$= \frac{1}{18}$

(iv) $9 \div \frac{1}{3} = 9 \times 3$ $[\because$ Reciprocal of $\frac{1}{3} = 3]$

= 27

(v) $24 \div \frac{6}{7} = 24 \times \frac{7}{6}$ [∵ Reciprocal of $\frac{6}{7} = \frac{7}{6}$]

$= 4 \times 7 = 28$

(vi) $3\frac{3}{5} \div \frac{4}{5} = \frac{18}{5} \div \frac{4}{5}$

$= \frac{18}{5} \times \frac{5}{4}$ [∵ Reciprocal of $\frac{4}{5} = \frac{5}{4}$]

$= \frac{18}{4} = \frac{9}{2} = 4\frac{1}{2}$

(vii) $3\frac{3}{7} \div \frac{8}{21} = \frac{24}{7} \div \frac{8}{21}$

$= \frac{24}{7} \times \frac{21}{8}$ [∵ Reciprocal of $\frac{8}{21} = \frac{21}{8}$]

$= 3 \; 3 = 9$

(viii) $5\frac{4}{7} \div 1\frac{3}{10} = \frac{39}{7} \div \frac{13}{10}$

$= \frac{39}{7} \times \frac{10}{13}$ [∵ Reciprocal of $\frac{13}{10} = \frac{10}{13}$]

$= \frac{30}{7} = 4\frac{2}{7}$

(ix) $15\frac{3}{7} \div 1\frac{23}{49} = \frac{108}{7} \div \frac{72}{49}$

$= \frac{108}{7} \times \frac{49}{72}$ [∵ Reciprocal of $\frac{72}{49} = \frac{49}{72}$]

$= \frac{9 \times 7}{1 \times 6} = \frac{3 \times 7}{1 \times 2} = \frac{21}{2} = 10\frac{1}{2}$

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