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 $7 = \frac{1}{7}$ [$\because 7 \times \frac{1}{7} = 1$]
- (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) $\frac{4}{7} \div \frac{9}{14} = \frac{4}{7} \times \frac{14}{9}$ [: Reciprocal of $\frac{9}{14} = \frac{14}{9}$] $= \frac{8}{9}$
- (ii) $\frac{7}{10} \div \frac{3}{5} = \frac{7}{10} \times \frac{5}{3}$ [: Reciprocal of $\frac{3}{5} = \frac{5}{3}$] $= \frac{7}{6} = 1 \frac{1}{6}$
- (iii) $\frac{8}{9} \div 16 = \frac{8}{9} \times \frac{1}{16}$ [: Reciprocal of 16 = $\frac{1}{16}$] $= \frac{1}{18}$
- (iv) $9 \div \frac{1}{3} = 9 \times 3$ [: Reciprocal of $\frac{1}{3}$ = 3]

(v)
$$24 \div \frac{6}{7} = 24 \times \frac{7}{6}$$
 [: Reciprocal of $\frac{6}{7} = \frac{7}{6}$]
$$= 4 \times 7 = 28$$

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

$$= \frac{18}{5} \times \frac{5}{4} \qquad [\because \text{Reciprocal of } \frac{4}{5} = \frac{5}{4}]$$

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

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

$$= \frac{24}{7} \times \frac{21}{8} \qquad [\because \text{Reciprocal of } \frac{8}{21} = \frac{21}{8}]$$

$$= 3 \ 3 = 9$$

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

$$= \frac{39}{7} \times \frac{10}{13} \qquad [\because \text{Reciprocal of } \frac{13}{10} = \frac{10}{13}]$$

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

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

$$= \frac{108}{7} \times \frac{49}{72} \qquad [\because \text{Reciprocal of } \frac{72}{49} = \frac{49}{72}]$$

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

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