

Ch - 02MathematicsClass - VIIExc - 2.4Complete solution.

- Q.1. Find (i) $12 \div \frac{3}{4}$ (ii) $14 \div \frac{5}{6}$
(iii) $8 \div \frac{7}{3}$ (iv) $4 \div \frac{8}{3}$.

Sol.

$$(i) \quad 12 \div \frac{3}{4}$$

$$= \frac{12 \times \frac{4}{3}}{1}$$

$$= \frac{4 \times 4}{1} = \underline{16}$$

(Reciprocal of divisor).

$$(ii) \quad 14 \div \frac{5}{6}$$

$$= 14 \times \frac{6}{5}$$

$$= \frac{14 \times 6}{5} = \frac{84}{5} = \underline{16 \frac{4}{5}}$$

(Reciprocal of divisor)

$$(iii) \quad 8 \div \frac{7}{3}$$

$$= 8 \times \frac{3}{7} = \frac{8 \times 3}{7} = \frac{24}{7}$$

$$= \underline{\underline{3 \frac{3}{7}}}$$

$$(iv) 4 \div \frac{8}{3}$$

$$= 4 \times \frac{3}{8} = \frac{3 \times 4}{8} = \frac{3}{2} = \underline{1\frac{1}{2}}$$

Q.2. Find the reciprocal of each of the following:-

$$(i) \frac{3}{7} \quad (ii) \frac{5}{8} \quad (iii) \frac{9}{7} \quad (iv) \frac{6}{5}$$

Sol. (i) $\frac{3}{7}$,

$$\text{Reciprocal of } \frac{3}{7} = \underline{\frac{7}{3}}$$

$\frac{7}{3}$ is improper fraction.

(ii) $\frac{5}{8}$,

$$\text{Reciprocal of } \frac{5}{8} = \underline{\frac{8}{5}}$$

$\frac{8}{5}$ is improper fraction.

(iii) $\frac{9}{7}$,

$$\text{Reciprocal of } \frac{9}{7} = \underline{\frac{7}{9}}$$

$\frac{7}{9}$ is proper fraction.

(iv) Reciprocal of $\frac{6}{5} = \underline{\frac{5}{6}}$.

$\frac{5}{6}$ is proper fraction. \rightarrow

Q.3. Find (i) $\frac{7}{3} \div 2$ (ii) $\frac{4}{9} \div 5$
(iii) $\frac{6}{13} \div 7$ (iv) $4\frac{1}{3} \div 3$.

Sol. (i) $\frac{7}{3} \div 2$
 $= \frac{7}{3} \times \frac{1}{2} = \frac{7 \times 1}{3 \times 2} = \frac{7}{6} = \underline{1\frac{1}{6}}$.

(ii) $\frac{4}{9} \div 5$
 $= \frac{4}{9} \times \frac{1}{5} = \frac{4 \times 1}{9 \times 5} = \underline{\frac{4}{45}}$.

(iii) $\frac{6}{13} \div 7$
 $= \frac{6}{13} \times \frac{1}{7} = \frac{6 \times 1}{13 \times 7} = \underline{\frac{6}{91}}$.

(iv) $4\frac{1}{3} \div 3 = \frac{13}{3} \times \frac{1}{3} = \frac{13 \times 1}{3 \times 3}$
 $= \frac{13}{9} = \underline{1\frac{4}{9}}$.

Q.4. Find (i) $\frac{2}{5} \div \frac{1}{2}$ (ii) $\frac{4}{9} \div \frac{2}{3}$
(iii) $\frac{3}{7} \div \frac{8}{7}$ (iv) $2\frac{1}{3} \div \frac{3}{5}$
(v) $2\frac{1}{5} \div 1\frac{1}{5}$



Sol. (i) $\frac{2}{5} \div \frac{1}{2}$

$$= \frac{2}{5} \times \frac{2}{1} = \frac{2 \times 2}{5 \times 1} = \frac{4}{5}$$

(ii) $\frac{4}{9} \div \frac{2}{3}$

$$= \frac{4}{9} \times \frac{3}{2} = \frac{2 \times 1}{3 \times 1} = \frac{2}{3}$$

(iii) $\frac{3}{7} \div \frac{8}{7}$

$$= \frac{3}{7} \times \frac{7}{8} = \frac{3 \times 1}{1 \times 8} = \frac{3}{8}$$

(iv) $2\frac{1}{3} \div \frac{3}{5}$

$$= \frac{7}{3} \div \frac{3}{5} = \frac{7}{3} \times \frac{5}{3} = \frac{35}{9}$$

(v) $2\frac{1}{5} \div 1\frac{1}{5}$

$$= \frac{11}{5} \div \frac{6}{5} = \frac{11}{5} \times \frac{5}{6} = \frac{11}{6}$$
$$= 1\frac{5}{6}$$