

Q1 Multiply

(a) $\frac{2}{8} \times 54^9 = 18$

(b) $\frac{7}{8} \times 40^5 = 35$

(c) $\frac{3}{4} \times \frac{1}{2} = \frac{3}{8}$

(d) $\frac{8}{9} \times \frac{6}{7}^2 = \frac{16}{21}$

(e) $\frac{27}{40} \times \frac{20}{21} = \frac{9}{14}$

(f) $\frac{16}{35} \times \frac{21}{48} = \frac{1}{5}$

Q2 Multiply

(a) $5 \times 4\frac{3}{10}$

$5 \times \frac{43}{10} = \frac{43}{2} = 21\frac{1}{2}$

(b) $4 \times 7\frac{1}{3}$

$4 \times \frac{22}{3} = \frac{88}{3} = 24\frac{1}{3}$

(c) $20 \times 10\frac{3}{4}$

$20 \times \frac{43}{4} = 215$

(d) $\frac{1}{3} \times 6\frac{3}{10}$

$\frac{1}{3} \times \frac{63}{10} = \frac{21}{10} = 2\frac{1}{10}$

(e) $\frac{1}{7} \times 14\frac{3}{4}$

$\frac{1}{7} \times \frac{59}{4} = \frac{59}{28}$

$= 2\frac{3}{28}$

(f) $\frac{3}{4} \times 8\frac{1}{2}$

$\frac{3}{4} \times \frac{17}{2} = \frac{51}{8}$

$= 6\frac{3}{8}$

Q3

Sol

Total students = 50

Football students = $\frac{1}{5}$ of total
= $\frac{1}{5} \times \frac{10}{50} = 10$ students

Cricket students = $\frac{3}{5}$ of total
= $\frac{3}{5} \times \frac{10}{50} = 30$ students

Basketball students = $50 - (10 + 30)$
= $50 - 40$
= 10 students

Q4 Find

(a) $\frac{1}{3}$ of 27
 $\frac{1}{3} \times \frac{9}{27} = 9$

(b)(i) $\frac{4}{5}$ of 50
 $\frac{4}{5} \times \frac{10}{50} = 40$

(ii) $\frac{1}{3}$ of 39
 $\frac{1}{3} \times \frac{13}{39} = 13$

(ii) $\frac{4}{5}$ of 100
 $\frac{4}{5} \times \frac{20}{100} = 80$

(iii) $\frac{1}{3}$ of 18
 $\frac{1}{3} \times \frac{6}{18} = 6$

(iii) $\frac{4}{5} \times \frac{51}{255}$
204

Sols. Book Read in 1 hour = $\frac{1}{4}$.

Book Read in $3\frac{1}{5}$ hour = $\frac{1}{4} \times 3\frac{1}{5}$

= $\frac{1}{4} \times \frac{16}{5} = \frac{4}{5}$ Ans

Ex: \rightarrow 2B

Q1 find the Reciprocal

(a) $\frac{3}{5} = \frac{5}{3}$

(c) $\frac{11}{7} = \frac{7}{11}$

(b) $\frac{7}{8} = \frac{8}{7}$

(d) $5 = \frac{1}{5}$

Q2 find

(a) $7 \div \frac{2}{5}$

$$7 \times \frac{5}{2} = \frac{35}{2} = 17\frac{1}{2}$$

(b) $6 \div \frac{5}{7}$

$$6 \times \frac{7}{5} = \frac{42}{5} = 8\frac{2}{5}$$

(c) $2 \div \frac{10}{11}$

$$2^1 \times \frac{11}{10} = \frac{11}{5} = 2\frac{1}{5}$$

(d) $\frac{2}{3} \div 4$

$$\frac{2}{3} \times \frac{1}{4} = \frac{2}{12} = \frac{1}{6}$$

(e) $\frac{8}{9} \div 8$

$$\frac{8}{9} \times \frac{1}{8} = \frac{1}{9}$$

(f) $\frac{3}{5} \div \frac{1}{4}$

$$\frac{3}{5} \times 4 = \frac{12}{5}$$

$$= 2\frac{2}{5}$$

(g) $\frac{1}{2} \div \frac{4}{5}$

$$\frac{1}{2} \times \frac{5}{4} = \frac{5}{8}$$

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

$$\frac{5}{2} \times \frac{5}{3} = \frac{25}{6}$$

$$= 4\frac{1}{6}$$

Q4

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

$$\frac{2}{3} \times \frac{5}{1} = \frac{10}{3} = 3\frac{1}{3}$$

(b) $\frac{2}{3} \div \frac{1}{6}$

$$\frac{2}{3} \times \frac{6}{1} = 4$$

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

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

(d) $\frac{5}{6} \div \frac{2}{3}$

$$\frac{5}{6} \times \frac{3}{2} = \frac{5}{4} = 1\frac{1}{4}$$

(e) $\frac{4}{7} \div \frac{3}{7}$

$$\frac{4}{7} \times \frac{7}{3} = \frac{4}{3} = 1\frac{1}{3}$$

(f) $\frac{4}{9} \div \frac{2}{7}$

$$\frac{4}{9} \times \frac{7}{2} = \frac{14}{9} = 1\frac{5}{9}$$

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

$$\frac{7}{\cancel{8}_1} \times \frac{\cancel{8}^1}{3} = \frac{7}{3} = 2\frac{1}{3}$$

$$(h) \frac{4}{7} \div \frac{8}{9}$$

$$\frac{\cancel{4}^1}{7} \times \frac{9}{\cancel{8}_2} = \frac{9}{14}$$

Q5.

$$\underline{\underline{Sol}} (a) \frac{2}{3} \div \frac{2}{1}$$

$$\frac{\cancel{2}^1}{3} \times \frac{1}{\cancel{2}_1} = \frac{1}{3} \text{ less than } 1.$$

$$(b) \frac{7}{10} \div \frac{2}{3}$$

$$\frac{7}{10} \times \frac{3}{2} = \frac{21}{20} \text{ greater than } 1$$

$$(c) \frac{8}{9} \div \frac{7}{10}$$

$$\frac{8}{9} \times \frac{10}{7} = \frac{80}{63} \text{ greater than } 1.$$

$$(d) \frac{2}{3} \div \frac{4}{3}$$

$$\frac{\cancel{2}^1}{3} \times \frac{3}{\cancel{4}_2} = \frac{1}{2} \text{ less than } 1.$$

$$(e) \frac{2}{3} \div \frac{1}{2}$$

$$\frac{2}{3} \times \frac{2}{1} = \frac{4}{3} \text{ greater than } 1.$$

$$(f) \frac{1}{6} \div \frac{1}{5}$$

$$\frac{1}{6} \times \frac{5}{1} = \frac{5}{6} \text{ less than } 1.$$

Q6. solve

$$(a) \left(\frac{2}{3} - \frac{4}{9} \right) \times 3 \frac{2}{5}$$

$$\left(\frac{6-4}{9} \right) \times \frac{17}{5}$$

$$\frac{2}{9} \times \frac{17}{5} = \frac{34}{45}$$

$$(b) \frac{2}{3} \div \left(1 \frac{2}{5} - 2 \frac{1}{15} \right)$$

$$\frac{2}{3} \div \left(\frac{7}{5} - \frac{31}{15} \right)$$

$$\frac{2}{3} \div \left(\frac{21-31}{15} \right)$$

$$\frac{2}{3} \div \left(\frac{-10}{15} \right)$$

$$\frac{2}{3} \times \frac{-15}{10} = -1.$$

$$(c) \frac{3}{10} - \frac{14}{8} \div \frac{56}{9}$$

$$\frac{3}{10} - \frac{14}{8} \times \frac{9}{56}$$

$$\frac{3}{10} - \frac{9}{32}$$

$$\frac{48-45}{160} = \frac{3}{160}$$

$$(d) \frac{1}{13} \times 3\frac{1}{3} + 2\frac{2}{3} \div 4\frac{1}{3}$$

$$\frac{1}{13} \times \frac{10}{3} + \frac{8}{3} \div \frac{13}{3}$$

$$\frac{1}{13} \times \frac{10}{3} + \frac{8}{\cancel{3}} \times \frac{\cancel{3}}{13}$$

$$\frac{10}{39} + \frac{8}{13}$$

$$\frac{10 + 24}{39} = \frac{34}{39} \underline{\underline{\text{Ans}}}$$