

Class - 6 Ch - 6 Exercise - 6.6

Question 1.

Evaluate the following:

$$(i) \frac{2}{5} \times \frac{3}{7}$$

$$(ii) \frac{3}{5} \times \frac{8}{9}$$

$$(iii) 7 \times 1\frac{2}{3}$$

Solution:

$$(i) \frac{2}{5} \times \frac{3}{7} \Rightarrow \frac{6}{35} \quad (ii) \frac{3}{5} \times \frac{8}{9} = \frac{8}{15}$$

$$(iii) 7 \times 1\frac{2}{3} = \frac{7}{1} \times \frac{5}{3} = \frac{35}{3} = 11\frac{2}{3}$$

Question 2.

Evaluate the following:

$$(i) \frac{2}{3} \times 60$$

$$(ii) \frac{4}{7} \times 280$$

$$(iii) \frac{2}{3} \text{ of } 1\frac{4}{9}.$$

Solution:

$$(i) \frac{2}{3} \times 60 = 2 \times 20 = 40$$

$$(ii) \frac{4}{7} \times 280$$

$$= 4 \times 40 = 160$$

$$(iii) \frac{2}{3} \text{ of } 1\frac{4}{9}$$

$$= \frac{2}{3} \times \frac{13}{9} = \frac{2 \times 13}{3 \times 9} = \frac{26}{27}$$

Question 3.

Find the reciprocal of each of the following

(i) $\frac{9}{13}$

(ii) $2\frac{3}{8}$

Solution:

(i) Reciprocal of $\frac{9}{13}$ is $\frac{13}{9} = 1\frac{4}{9}$

(ii) Reciprocal of $2\frac{3}{8}$ or $\frac{19}{8}$ is $\frac{8}{19}$

Question 4.

Evaluate the following:

(i) $\frac{8}{21} \div 4$

(ii) $\frac{4}{15} \div \frac{2}{5}$

(iii) $8 \div \frac{5}{6}$

(iv) $5\frac{1}{4} \div \frac{7}{8}$

(v) $5\frac{1}{3} \div 1\frac{1}{9}$

Solution:

$$(i) \frac{8}{21} \div 4 = \frac{8}{21} \times \frac{1}{4} = \frac{2}{21}$$

$$(ii) \frac{4}{15} \div \frac{2}{5}$$

$$= \frac{4}{15} \times \frac{5}{2} = \frac{2}{3}$$

$$(iii) 8 \div \frac{5}{6} = 8 \times \frac{6}{5} = \frac{48}{5} = 9\frac{3}{5}$$

$$(iv) 5\frac{1}{4} \div \frac{7}{8} = \frac{21}{4} \div \frac{7}{8} = \frac{21}{4} \times \frac{8}{7} = 6$$

$$(v) 5\frac{1}{3} \div 1\frac{1}{9} = \frac{16}{3} \div \frac{10}{9} = \frac{16}{3} \times \frac{9}{10}$$
$$= \frac{24}{5} = 4\frac{4}{5}$$