

NCERT Solutions For Class 7 Maths Fractions and Decimals Exercise 2.4

## Q1.Find:

(i) 
$$12 \div \frac{3}{4}$$
 (ii)  $14 \div \frac{5}{6}$  (iii)  $8 \div \frac{7}{3}$ 

(iv) 
$$4 \div \frac{8}{3}$$
 (v)  $3 \div 2\frac{1}{3}$  (vi)  $5 \div 3\frac{4}{7}$ 

## Ans:

(i) 
$$12 \div \frac{3}{4} = 12 \times \frac{4}{3} = 16$$

$$(ii)$$
14 ÷  $\frac{5}{6}$  = 14 ×  $\frac{6}{5}$  =  $\frac{84}{5}$ 

(iii) 
$$8 \div \frac{7}{3} = 8 \times \frac{3}{7} = \frac{24}{7}$$

(iv) 
$$4 \div \frac{8}{3} = 4 \times \frac{3}{8} = \frac{3}{2}$$

(v) 
$$3 \div 2\frac{1}{3} = 3 \div \frac{7}{3} = 3 \times \frac{3}{7} = \frac{9}{7}$$

(vi) 
$$5 \div 3\frac{4}{7} = 5 \div \frac{25}{7} = 5 \times \frac{7}{25} = \frac{7}{5}$$

**Q2.** Find the reciprocal of each of the following fractions. Classify the reciprocals as proper fractions, improper fractions and whole numbers.

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

(iv) 
$$\frac{6}{5}$$
 (v)  $\frac{12}{7}$  (vi)  $\frac{1}{8}$ 

(vii)
$$\frac{1}{11}$$

Ans:

A proper fraction is the fraction which has its denominator greater than its numerator while improper fraction is the fraction which has its numerator greater than its denominator. Whole numbers are a collection of all positive integers including 0.

(i)  $\frac{3}{7}$ 

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

Therefore, it is an improper fraction.

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

Reciprocal  $=\frac{8}{5}$ 

Therefore, it is an improper fraction.

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

Reciprocal  $=\frac{7}{9}$ 

Therefore, it is a proper fraction.

(iv)  $\frac{6}{5}$ 

Reciprocal  $=\frac{5}{6}$ 

Therefore, it is a proper fraction.

$$(v)\frac{12}{7}$$

Reciprocal = 
$$\frac{7}{12}$$

Therefore, it is a proper fraction.

(vi) 
$$\frac{1}{8}$$

Reciprocal 
$$=\frac{8}{1}$$

Therefore, it is a whole number.

$$(vii)\frac{1}{11}$$

Reciprocal = 
$$\frac{11}{1}$$

Therefore, it is a whole number.

Q3:

Find:

(i) 
$$\frac{7}{3} \div 2$$
 (ii)  $\frac{4}{9} \div 5$  (iii)  $\frac{6}{13} \div 7$ 

(iv) 
$$4\frac{1}{3} \div 3$$
 (v)  $3\frac{1}{2} \div 4$  (vi)  $4\frac{3}{7} \div 7$ 

Ans:

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

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

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

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

(v)
$$3\frac{1}{2} \div 4 = \frac{7}{2} \div 4 = \frac{7}{2} \times \frac{1}{4} = \frac{7}{8}$$

(vi) 
$$4\frac{3}{7} \div 7 = \frac{31}{7} \times \frac{1}{7} = \frac{31}{49}$$

## Q4. 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)  $3\frac{1}{2} \div \frac{8}{3}$  (vi)  $\frac{2}{5} \div 1\frac{1}{2}$ 

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

## Ans:

(i) 
$$\frac{2}{5} \div \frac{1}{2} = \frac{2}{5} \times 2 = \frac{4}{5}$$

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

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

(iv) 
$$2\frac{1}{3} \div \frac{3}{5} = \frac{7}{3} \div \frac{3}{5} = \frac{7}{3} \times \frac{5}{3} = \frac{35}{9}$$

$$(v)3\frac{1}{2} \div \frac{8}{3} = \frac{7}{2} \div \frac{8}{3} = \frac{7}{2} \times \frac{3}{8} = \frac{21}{16}$$

(vi) 
$$\frac{2}{5} \div 1\frac{1}{2} = \frac{2}{5} \div \frac{3}{2} = \frac{2}{5} \times \frac{2}{3} = \frac{4}{15}$$

(vii) 
$$3\frac{1}{5} \div 1\frac{2}{3} = \frac{16}{5} \div \frac{5}{3} = \frac{16}{5} \times \frac{3}{5} = \frac{48}{25}$$

(viii) 
$$2\frac{1}{5} \div 1\frac{1}{5} = \frac{11}{5} \div \frac{6}{5} = \frac{11}{5} \times \frac{5}{6} = \frac{11}{6}$$