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) $14 \div \frac{5}{6} = 14 \times \frac{6}{5} = \frac{84}{5}$

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

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