Rational Numbers Ex 1.7 Q1

Answer :

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

$$\text{(ii)}\ 5 \div \frac{-5}{7} = 5 \times \frac{7}{-5} = -7$$

$$\text{(iii)}\ \frac{-3}{4} \div \frac{9}{-16} = \frac{-3}{4} \times \frac{-16}{9} = \frac{4}{3}$$

$$\text{(iv)}\ \frac{-7}{8} \div \frac{-21}{16} = \frac{-7}{8} \times \frac{16}{-21} = \frac{2}{3}$$

$$\text{(v)}\ \frac{7}{-4} \div \frac{63}{64} = \frac{7}{-4} \times \frac{64}{63} = \frac{-16}{9}$$

$$\text{(vi)}\ 0 \div \frac{-7}{5} = 0 \times \frac{5}{-7} = 0$$

$$\text{(vii)}\ \frac{-3}{4} \div -6 = \frac{-3}{4} \times \frac{1}{-6} = \frac{1}{8}$$

$$\text{(viii)}\ \frac{2}{3} \div \frac{-7}{12} = \frac{2}{3} \times \frac{12}{-7} = \frac{-8}{7}$$

$$\text{(ix)}\ -4 \div \frac{-3}{5} = -4 \times \frac{5}{-3} = \frac{20}{3}$$

$$\text{(x)}\ \frac{-3}{13} \div \frac{-4}{65} = \frac{-3}{13} \times \frac{65}{-4} = \frac{15}{4}$$

Rational Numbers Ex 1.7 Q2

Answer :

$(\text{i})\ \frac{2}{5} \div \frac{26}{15} = \frac{2}{5} \times \frac{15}{26} = \frac{3}{13}$

$(\text{ii})\ \frac{10}{3} \div \frac{-35}{12} = \frac{10}{3} \times \frac{12}{-35} = \frac{-8}{7}$

$(\text{iii})\ -6 \div \frac{-8}{17} = -6 \times \frac{17}{-8} = \frac{51}{4}$

$(\text{iv})\ \frac{-40}{99} \div (-20) = \frac{-40}{99} \times \frac{1}{-20} = \frac{2}{99}$

$(\text{v})\ \frac{-22}{27} \div \frac{-110}{18} = \frac{-22}{27} \times \frac{18}{-110} = \frac{2}{15}$

$(\text{vi})\ \frac{-36}{125} \div \frac{-3}{75} = \frac{-36}{125} \times \frac{75}{-3} = \frac{36}{5}$

Rational Numbers Ex 1.7 Q3

Answer :

Let the other number *be* x.

$\therefore\ x \times (-10) = 15$

or $x = \frac{15}{-10} = \frac{3}{-2}$

So, the other number is $\frac{-3}{2}$.

Rational Numbers Ex 1.7 Q4

Answer :

Let the other number *be* x.

$\therefore\ \mathrm{x} \times \frac{-4}{15} = \frac{-8}{9}$

or $\mathrm{x} = \frac{-8}{9} \div \frac{-4}{15}$

or $\mathrm{x} = \frac{-8}{9} \times \frac{15}{-4}$

or $\mathrm{x} = \frac{10}{3}$

Thus, the other number is $\frac{10}{3}$.

********** END **********