RD SHARMA

Solutions

Class 7 Maths

Chapter 4

Ex 4.1

Q 1 . Write down the numerator of each of the following rational numbers :

(i) . $\frac{-7}{5}$

(ii) . $\frac{15}{-4}$

(iii) . $\frac{-17}{-21}$

(iv) . $\frac{8}{9}$

(v) . 5

SOLUTION :

Numerators are :

(i). -7

(ii) . 15

(iii) . -17

(iv) . 8

(v) . 5

Q 2 . Write down the denominator of each of the following rational numbers:

(i) . $\frac{-4}{5}$

(ii) . $\frac{11}{-34}$

(iii) . $\frac{-15}{-82}$

(iv) . 15

(v) . 0

SOLUTION :

Denominators are :

(i) . 5

(ii) . -34

(iii). -82

(iv). 1

(v). 1

Q 3 . Write down the rational number whose numerator is (-3) ×4 , and whose denominator is (34 – 23) ×(7 – 4).

SOLUTION :

According to the question :

Numerator = (-3) x 4 = -12

Denominator = (34 – 23) x (7 – 4) = 11 x 3 = 33

Therefore , Rational number = $\frac{-12}{32}$

Q 4 .Write the following rational numbers as integers :

$\frac{7}{1}$, $\frac{-12}{1}$, $\frac{34}{1}$, $\frac{-73}{1}$, $\frac{95}{1}$

SOLUTION :

Integers are 7 , -12 , 34 , -73 and 95 .

Q 5 .Write the following integers as rational numbers with denominator 1 :

-15 , 17 , 85 , -100

SOLUTION :

Rational numbers of given integers with denominator 1 are :

$\frac{-15}{1}$, $\frac{17}{1}$, $\frac{85}{1}$, $\frac{-100}{1}$

Q 6 .Write down the rational whose numerator is the smallest three digit number and denominator is the largest four digit number .

SOLUTION :

Smallest three digit number = 100

Largest four digit number = 9999

Therefore rational number = $\frac{100}{9999}$

Q 7 .Seperate positive and negative rational numbers from the following rational numbers :

$\frac{-5}{-7}$, $\frac{12}{-5}$, $\frac{7}{4}$, $\frac{13}{-9}$, 0 , $\frac{-18}{-7}$, $\frac{-95}{116}$, $\frac{-1}{-9}$

SOLUTION :

Given rational numbers can be rewritten as :

$\frac{5}{7}$, $\frac{-12}{5}$, $\frac{7}{4}$, $\frac{-13}{9}$, 0 , $\frac{18}{7}$, $\frac{-95}{116}$, $\frac{1}{9}$

Thus , positive rational numbers are :

$\frac{5}{7}$, $\frac{7}{4}$, $\frac{18}{7}$, $\frac{1}{9}$

Negative rational numbers are :

$\frac{-12}{5}$, $\frac{-13}{9}$, $\frac{-95}{116}$

Q 8 .Which of the following rational numbers are positive :

(i) . $\frac{-8}{7}$

(ii) . $\frac{9}{8}$

(iii) . $\frac{-19}{-13}$

(iv) . $\frac{-21}{13}$

SOLUTION :

The numbers can be rewritten as :

(i) . $\frac{-8}{7}$

(ii) . $\frac{9}{8}$

(iii) . $\frac{19}{13}$

(iv) . $\frac{-21}{13}$

Positive rational numbers are (ii) and (iii), i.e., $\frac{9}{8}$ and $\frac{-19}{-13}$

Q 9 .Which of the following rational numbers are negative ?

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

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

(iii) . $\frac{9}{-83}$

(iv) . $\frac{-115}{-197}$

SOLUTION :

The numbers can be rewritten as :

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

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

(iii) . $\frac{-9}{83}$

(iv) . $\frac{115}{197}$

Negative rational numbers are (i) and (iii) .