

## **EXERCISE 4.1**

# **PAGE NO: 4.3**

Write down the numerator of each of the following rational numbers:
(i) (-7/5)
(ii) (14/-4)
(iii) (-17/-21)
(iv) (8/9)
(v) 5

# Solution:

(i) Given (-7/5) Numerator of (-7/5) is -7

(ii) Given (14/-4) Numerator of (14/-4) is 1

(iii) Given (-17/-21) Numerator of (-17/-21) is -17

(iv) Given (8/9) Numerator of (8/9) is 8

(v) Given 5 Numerator of 5 is 5

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

(i) (-4/5) (ii) (11/-34) (iii) (-15/-82) (iv) 15 (v) 0

## Solution:

(i) Given (-4/5) Denominator of (-4/5) is 5

(ii) Given (11/-34)

https://byjus.com



Denominator of (11/-34) is -43

(iii) Given (-15/-82) Denominator of (15/-82) is -82

(iv) Given 15 Denominator of 15 is 1

(v) Given 0 Denominator of 0 is any non-zero integer

3. Write down the rational number whose numerator is  $(-3) \times 4$ , and whose denominator is  $(34 - 23) \times (7 - 4)$ .

### Solution:

Given numerator =  $(-3) \times 4 = -12$ Denominator =  $(34 - 23) \times (7 - 4)$ =  $11 \times 3 = 33$ Therefore the rational number = (-12/33)

4. Write down the rational numbers as integers: (7/1), (-12/1), (34/1), (-73/1), (95/1)

#### Solution:

Given (7/1), (-12/1), (34/1), (-73/1), (95/1) Integers of (7/1), (-12/1), (34/1), (-73/1), (95/1) are 7, -12, 34, -73, 95

#### 5. Write the following integers as rational numbers: -15, 17, 85, -100

## Solution:

Given -15, 17, 85, -100 The rational numbers of given integers are (-15/1), (17/1), (85/1) and (-100/1)

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

#### Solution:

Smallest three digit number = 100

https://byjus.com



Largest four digit number = 9999 Therefore the rational number is = 100/9999

# 7. Separate positive and negative rational numbers from the following rational numbers:

(-5/-7), (12/-5), (7/4), (13/-9), 0, (-18/-7), (-95/116), (-1/-9)

# Solution:

Given (-5/-7), (12/-5), (7/4), (13/-9), 0, (-18/-7), (-95/116), (-1/-9) A rational number is said to be positive if its numerator and denominator are either positive integers or both negative integers.

Therefore positive rational numbers are: (-5/-7), (-18/-7), (7/4), (-1/-9)

A rational number is said to be negative integers if its numerator and denominator are such that one of them is positive integer and another one is a negative integer. Therefore negative rational numbers are: (12/-5), (13/-9), (-95/116)

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

(i) (-8/7) (ii) (9/8) (iii) (-19/-13) (iv) (-21/13)

# Solution:

Given (-8/7), (9/8), (-19/-13), (-21/13) A rational number is said to be positive if its numerator and denominator are either positive integers or both negative integers. Therefore the positive rational numbers are (9/8) and (-19/-13)

# 9. Which of the following rational numbers are negative:

(i) (-3/7) (ii) (-5/-8) (iii) (9/-83) (iv) (-115/-197)

## Solution:

Given (-3/7), (-5/-8), (9/-83), (-115/-197) A rational number is said to be negative integers if its numerator and denominator are

https://byjus.com



such that one of them is positive integer and another one is a negative integer. Therefore negative rational numbers are (-3/7) and (9/-83)



