Number System Ex 1.1 Q4

Answer :

We need to find 5 rational numbers between $\frac{3}{5}$ and $\frac{4}{5}$.

Since, LCM of denominators $= LCM(5,5) = 5$

So, consider

$$\frac{3}{5} = \frac{3}{5} \times \frac{6}{6}$$

$$\Rightarrow \frac{3}{5} = \frac{18}{30}$$

And,

$$\Rightarrow \frac{4}{5} = \frac{4}{5} \times \frac{6}{6}$$

$$\Rightarrow \frac{4}{5} = \frac{24}{30}$$

Hence 5 rational numbers between $\frac{3}{5}$ and $\frac{4}{5}$ are: $\boxed{\frac{19}{30}, \frac{20}{30}, \frac{21}{30}, \frac{22}{30}, \frac{23}{30}}$ OR

$\boxed{\frac{19}{30}, \frac{2}{3}, \frac{7}{10}, \frac{11}{15}, \frac{23}{30}}$

Number System Ex 1.1 Q5

Answer :

(i) False, because whole numbers start from zero and natural numbers start from one

(ii) True, because it can be written in the form of a fraction with denominator 1

(iii) False, rational numbers are represented in the form of fractions. Integers can be represented in the form of fractions but all fractions are not integers. for example: 34 is a rational number but not an integer.

(iv) True, because natural numbers belong to whole numbers

(v) False, because set of whole numbers contains only zero and set of positive integers, whereas set of integers is the collection of zero and all positive and negative integers.

(vi) False, because rational numbers include fractions but set of whole number does not include fractions.

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