



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

$$\begin{aligned}\frac{3}{5} &= \frac{3}{5} \times \frac{6}{6} \\ \Rightarrow \frac{3}{5} &= \frac{18}{30}\end{aligned}$$

And,

$$\begin{aligned}\Rightarrow \frac{4}{5} &= \frac{4}{5} \times \frac{6}{6} \\ \Rightarrow \frac{4}{5} &= \frac{24}{30}\end{aligned}$$

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:  $\frac{3}{4}$  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 \*\*\*\*\*