Rational Numbers Ex 1.8 Q5

Answer :

The L.C.M of the denominators $(2 \text{ and } 4)$ *is* 4.

So, we can write $\frac{1}{4}$ *as it is.*

Also, $\frac{1}{2} = \frac{1\times2}{2\times2} = \frac{2}{4}$

As the integers between the numerators 1 *and* 2 *of both the fractions are not sufficient, we will multiply the fractions by* 20.

$\therefore \frac{1}{4} = \frac{1\times20}{4\times20} = \frac{20}{80}$

$\frac{2}{4} = \frac{2\times20}{4\times20} = \frac{40}{80}$

Between 20 *and* 40, *there are* 19 *integers. They are* $21, 22, 23, 24, 25, 26, 27....39, 40$.

Thus, $\frac{21}{40}, \frac{22}{40}, \frac{23}{40}, \frac{24}{40}, \frac{25}{40}, \ldots\ldots\ldots\ldots\ldots\ldots \frac{38}{40}$ *and* $\frac{39}{40}$ *are the fractions.*

We can take any 10 *of these.*

Rational Numbers Ex 1.8 Q6

Answer :

L.C.M of the denominators $(2 \text{ and } 5)$ is 10.

We can write :

$\frac{-2}{5} = \frac{-2\times2}{5\times2} = \frac{-4}{10}$

and $\frac{1}{2} = \frac{1\times5}{2\times5} = \frac{5}{10}$

Since the integers between the numerators $(-4 \text{ and } 5)$ of both *the* fractions *are not sufficient,* we *will* multiply the fractions by 2.

$\therefore \frac{-4}{10} = \frac{-4\times2}{10\times2} = \frac{-8}{20}$

$\frac{5}{10} = \frac{5\times2}{10\times2} = \frac{10}{20}$

There are 17 *integers* between -8 and 10, *which are* $-7, -6, -5, -4\ldots\ldots\ldots\ldots\ldots$ $.8, 9$.

These can be written as :

$\frac{-7}{20}, \frac{-6}{20}, \frac{-5}{20}, \frac{-4}{20}, \frac{-3}{20}, \ldots\ldots\ldots\ldots\ldots\ldots \frac{8}{20}$ and $\frac{9}{20}$

We can take any 10 of these.

Rational Numbers Ex 1.8 Q7

Answer :

The L.C.M of the denominators 5 *and* 4 *of both the fractions is* 20.

We can write :

$\frac{3}{5} = \frac{3\times4}{5\times4} = \frac{12}{20}$

$\frac{3}{4} = \frac{3\times5}{4\times5} = \frac{15}{20}$

Since the integers between the numerators 12 *and* 15 *are not sufficient, we will multiply both the fractions by* 5.

$\frac{12}{20} = \frac{12\times5}{20\times5} = \frac{60}{100}$

$\frac{15}{20} = \frac{15\times5}{20\times5} = \frac{75}{100}$

There are 14 *integers between* 60 *and* 75. *They are* $61, 62, 63.....73$ *and* 74.

Therefore, $\frac{60}{100}, \frac{61}{100}, \frac{62}{100} \ldots\ldots\ldots \frac{73}{100}$ *and* $\frac{74}{100}$ *are the* 14 *fractions.*

We can take any 10 *of these.*

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