Worksheet-6

Subject: - Mathematics

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Class & Sec: Roll No. Date: 21.03.2020 Name:



1. Represent these numbers on the number line. (i) $\frac{7}{4}$. (ii) $\frac{-5}{6}$ 2. Represent $\frac{-2}{11}$, $\frac{-5}{11}$, $\frac{-9}{11}$ on the number line.

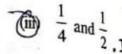
Write five rational numbers which are smaller than 2.

4. Find ten rational numbers between
$$\frac{-2}{5}$$
 and $\frac{1}{2}$.

Find five rational numbers between.

(1)
$$\frac{2}{3}$$
 and $\frac{4}{5}$

(i)
$$\frac{2}{3}$$
 and $\frac{4}{5}$ (ii) $\frac{-3}{2}$ and $\frac{5}{3}$



6) Write five rational numbers greater than -2.

7. Find ten rational numbers between $\frac{3}{5}$ and $\frac{3}{4}$.



WHAT HAVE WE DISCUSSED?

- 1. Rational numbers are closed under the operations of addition, subtraction and multiplication.
- 2. The operations addition and multiplication are
 - (i) commutative for rational numbers.
 - (ii) associative for rational numbers.
- The rational number 0 is the additive identity for rational numbers.
- The rational number 1 is the multiplicative identity for rational numbers.
- The additive inverse of the rational number $\frac{a}{b}$ is $-\frac{a}{b}$ and vice-versa.
- The reciprocal or multiplicative inverse of the rational number $\frac{a}{b}$ is $\frac{c}{d}$ if $\frac{a}{b} \times \frac{c}{d} = 1$.
- 7. Distributivity of rational numbers: For all rational numbers a, b and c, a(b+c) = ab + ac and a(b-c) = ab - ac
- 8. Rational numbers can be represented on a number line.
- Between any two given rational numbers there are countless rational numbers. The idea of mea helps us to find rational numbers between two rational numbers.