National Institute of Open Schooling (NIOS)
Secondary Course
Lesson – 01: Number System
Worksheet-01

1. How many rational numbers are possible between any two rational numbers? Find out any two rational numbers between $\frac{7}{9}$ and $\frac{8}{9}$.

2. Write any five equivalent forms of the rational numbers $\frac{3}{5}$ and $\frac{5}{7}$. Observe and identify the commonness among the equivalent forms of a rational number.

3. Draw a horizontal number line and locate any two irrational numbers on the number line. Write your observations

4. Write the lowest form of the rational numbers $\frac{48}{192}$ and $\frac{75}{625}$. Write your observations by comparing any rational numbers with its lowest form.

5. Draw a number line and represent the rational numbers $\frac{2}{4}$ and $\frac{5}{3}$ on the number line. Write your observations

6. Compare the following rational numbers by changing them to equivalent forms:
   i. $\frac{2}{3}$ and $\frac{3}{5}$
   ii. $\frac{5}{11}$ and $\frac{3}{7}$

7. A number when multiplied by $\frac{3}{10}$ gives $\frac{15}{25}$. Find the number.

8. Represent the following decimals in the rational form.
   i. 0.33333.....
   ii. 0.625
   iii. 3.75
   iv. 14.44

9. Find any three rational numbers between the following numbers.

   i. 2.7 and 3.5

   ii. 5.50 and 7.25

10. Express the approximate value of the following by rounding it off to two decimals.

   i. 5.728532

   ii. 0.888888

   iii. 6.323575