# 薪 <br> OPTIMUM <br> INTERNATIONAL SCHOOL 

## CLASS -IX

## Maths

## CHAPTER 2 - NUMBER SYSTEMS

> Watch the online videos "NUMBER SYSTEMS -Lecture 1" from Optimum Online E-Learning Platform and try to comprehend the concepts of Representation of Irrational numbers on Real Line. After that try to solve the questions given in your assignment.
$>$ Representation of irrational numbers on number line Lecture no 03
$>$ Representation of irrational number on number line Lecture no 04

1. Complete the following sentences:
I. Every point on the number line corresponds to a ........ number which many be either $\qquad$ or $\qquad$
II. The decimal form of an irrational number is neither $\qquad$ nor $\qquad$
III. The decimal representation of a rational number is either $\qquad$ or
IV. Every real number is either $\qquad$ number or number.
2. Represent $\sqrt{ } 3.5, \sqrt{ } 9.4, \sqrt{ } 10.5$ and on the real number line.
3. Represent $\sqrt{ } 6, \sqrt{7}, \sqrt{8}$ on the number line.
4. Find whether the following statements are true or false:
I. Every real number is either rational or irrational.
II. $\pi$ is an irrational number.
III. Irrational numbers cannot be represented by points on the number line.
5. Visualise 2.665 on the number line, using successive magnification.
6. Visualise the representation of 5.37 on the number line up to 5 decimal places, that is up to 5.37777 .
7. In the following equation, find which variables $x, y, z$ etc. represent rational or irrational numbers:
I. $\quad x^{2}=5$
II. $y^{2}=9$
III. $\quad z^{2}=0.004$
IV. $u^{2}=\frac{17}{4}$
V. $v^{3}=3$
VI. $\quad \mathrm{w}^{2}=27$
VII. $\quad \mathrm{t}^{2}=0.4$
8. Is zero a rational number? Can you write it in the form $\mathrm{p} / \mathrm{q}$, where p and q are integers and $q \neq 0$ ?

**Link of Optimum Online E-Learning Platform:- www.optimumschool.net/online In case of any query call at $\mathbf{+ 9 1 - 9 8 1 8 0 3 3 2 1 3}$
