

Chapter 1 - Real Numbers

Natural Numbers:

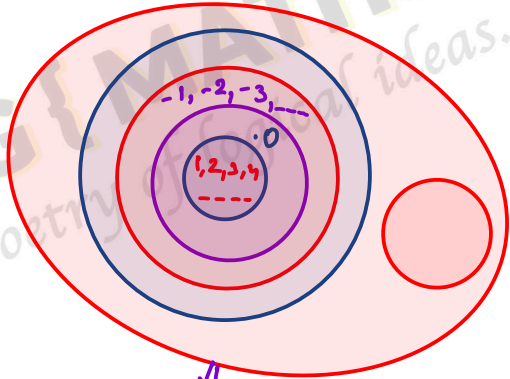
1, 2, 3, 4 - - - - -

Whole Numbers:

0, 1, 2, 3, 4 - - - - -

Integers

... - 4, -3, -2, -1, 0, 1, 2, 3, 4 - - - - -



↓
Real Numbers
= Rational + Irrational.

Rational Numbers $\Rightarrow \frac{p}{q}$ where $q \neq 0$

Exp = $\frac{5}{2}$

= 2.5

Exp = $\frac{10}{3}$

3.333.....

(Repeating)

$$\begin{array}{r} 2 \overline{) 5.0} \\ \underline{4} \\ 10 \\ \underline{10} \\ 0 \end{array}$$

→ Terminating

$$\begin{array}{r} 3 \overline{) 10.000} \\ \underline{9} \\ 10 \\ \underline{9} \\ 10 \\ \underline{9} \\ 10 \\ \underline{9} \\ \dots \end{array}$$

→ Non-terminating
(Repeating)

Rational Numbers

Terminating

Non-terminating

Irrational numbers :-

$\pi, \sqrt{2}, \sqrt{3}, \sqrt{5}$ -----

$\sqrt{4}$ X

$\sqrt{(2)^2}$

$$\begin{array}{r} 3.142\text{-----} \\ \sqrt{22} \\ \underline{21} \\ 10 \\ \underline{7} \\ 30 \\ \underline{28} \\ 20 \\ \underline{14} \\ 60 \end{array}$$