Number Systems

1) Natural No's: All counting no's are called Natural no's

        ↳ 'N'

$$N = 1, 2, 3, 4 \cdots \infty \qquad (1, \infty)$$

2) whole No's: All counting no's along with zero.

        ↳ 'W'
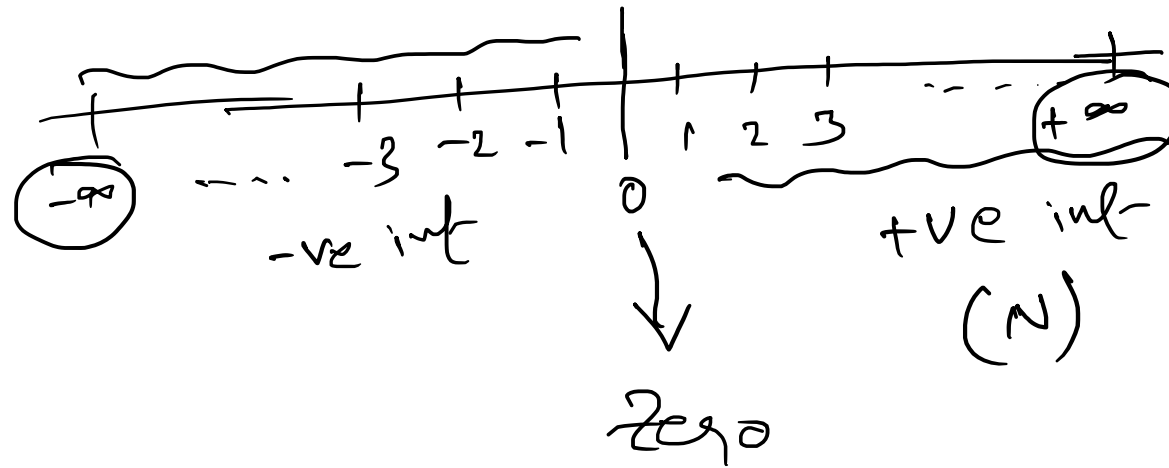
$$W = \boxed{0,} \; 1, 2, 3 \cdots \infty$$

3) Integers: $\longrightarrow \mathbb{Z}$

$\longrightarrow$ +ve int $\mathbb{Z}^+ = 1, 2, 3, \ldots \ldots \infty \;(N)$

$\longrightarrow$ -ve int $\mathbb{Z}^- = -1, -2, -3, \ldots \ldots -\infty$

$\longrightarrow$ zero $= 0$

$$\mathbb{Z} = (-\infty, +\infty)$$

-ve int   0   +ve int (N)

zero

Number Systems

1) Rational no's : The no's able $\boxed{\dfrac{P \to \text{int}}{q \to \text{int}}}$ but $q \neq 0$

$$E_n \nearrow \quad 'Q'$$

$$Q = (-\infty, +\infty)$$

$$\dfrac{3}{1} > \qquad \dfrac{7}{9}, \dfrac{8}{17} \text{-----}$$

5) Irrational no's : $Q', \bar{Q}$ not able $\dfrac{P}{q}$

$\sqrt{2} \cong \boxed{1.414...} \times$

$$= \dfrac{1414}{1000}$$

$$E_x : \sqrt{2}, \sqrt{3}, \sqrt{5}, \sqrt{6}, \sqrt{7}, \sqrt{8}, \sqrt{10} \text{----}$$

$$\pi = \dfrac{22}{7} \times \qquad \pi = 3.14 \text{----}$$