All the vowels of <u>english</u> alphabets:

{a, e, <u>í</u>, o, u}

Factors of 10 - {1,2,5,10}

Collection of top 10 most talented people in India.

 $= \underbrace{\{a, e, \underline{i}, o, u\}}_{}$

- 1. Set defined by Capital letters
- 2. Elements/members/objects of set are enclosed within {}

a is a member of set ${\mathcal V}$

- = a belongs to V
- $= a \in V$

- . b is not a member of ν
- = b does not belong to V
- $= 6 \not\subset V$
- 1. Natural numbers:

{ 1, 2, 3, 4, 5,}

2. Whole Numbers: { 0, 1, 2, 3, 4,}

3. Integers: Z

{...., -3, -2, -1, 0, 1, 2, 3,}

4. Posítíve íntegers:

 \bigcirc

5/0

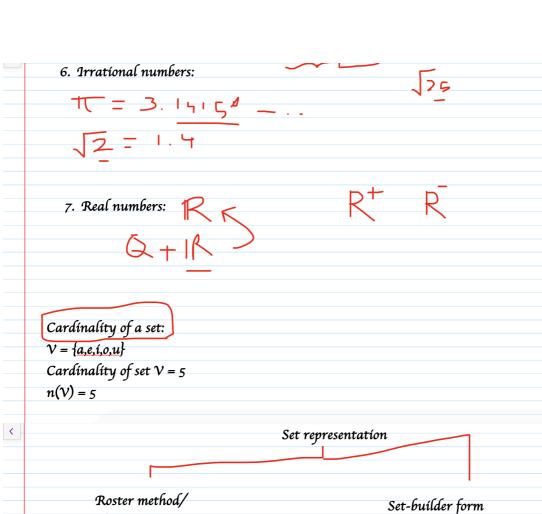
50/50/

$$2/3$$
, $10/5$, $5 = 5/1$

5. Rational Numbers:

2/3 = 0.666666666666

13/7 = 1.85714 285714 2



Empty sets:

A = { set of all the Indian states which are outside Asia }

= { }

 $B = \{x : 7 < x < 11, x \text{ is prime }\}$ = \{\}

$$\mathcal{V} = \{a, e, \underline{i}, o, u\}$$

Equal Sets:

- Order of elements is not imp.
- Write elements once

$$A = \{1, 2, 3, 4\}$$
 $B = \{4, 2, 1, 3\}$

$$C = \{2, 3, 4, 5, 6\}$$

$$A = B$$

$$A \neq C$$

<

Subsets:

$$A = \{1, 2, 3, 4, 5\}$$

$$B = \{2, 4, 3\}$$

$$\longrightarrow$$
 1s a subset of

$$C = \{2, 3, 4, 5, 1\}$$



Is not a subset of

$$A \subset A$$

 $A \supset A$

Power Sets:

$$K = 2^{K}$$

$$\mathcal{L}(\nabla) =$$

$$\mathcal{A} = \{1, 2, 3\}$$

$$2^{3} = 9$$