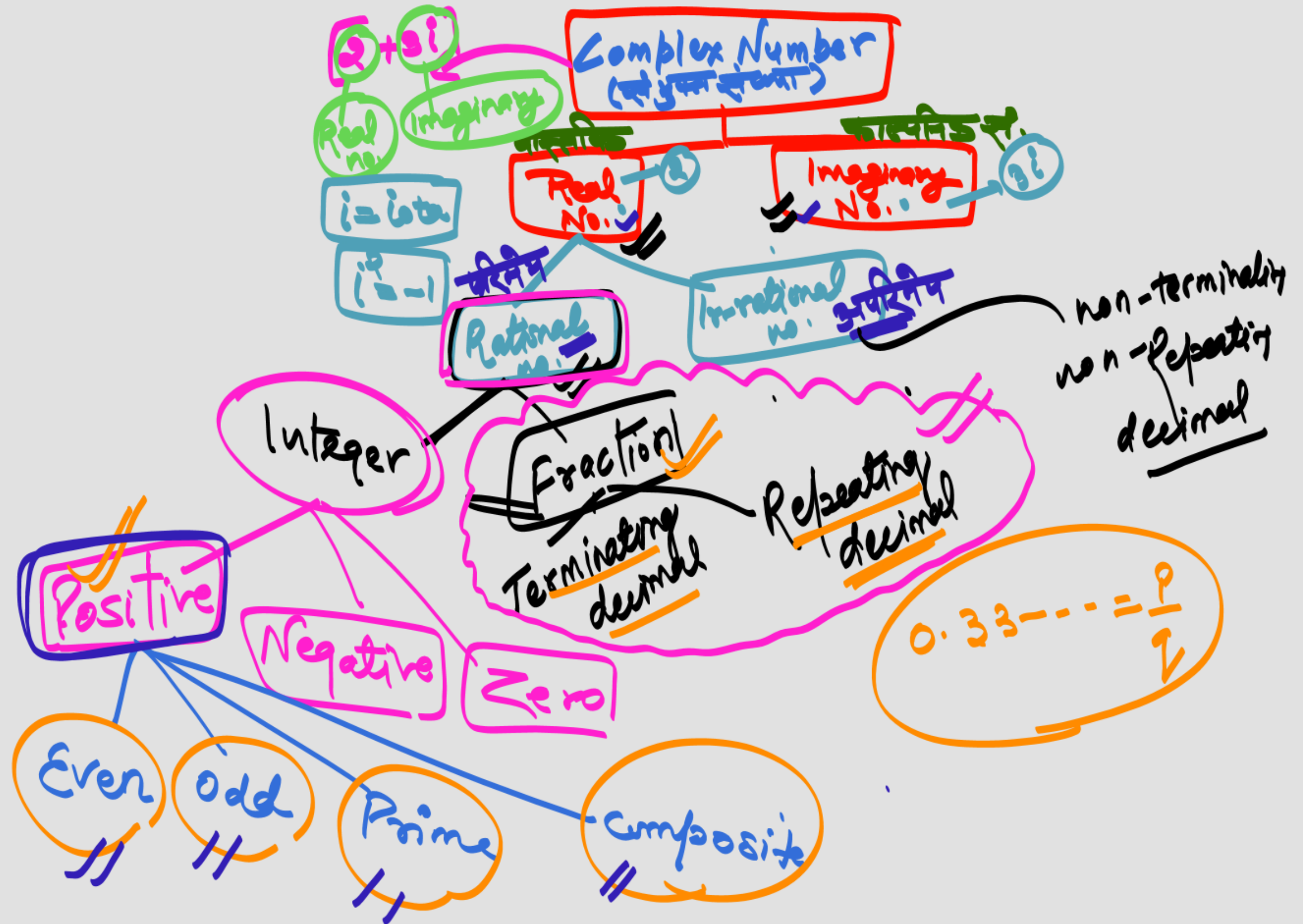


Number System

#

Numbers

(نمبرز)



Rational

0.

$\frac{p}{q}$

Form

decim

Ex.

0.125

4.12

8.67

Ex:-

0.3333...

0.4444...

0.666...

0.124968792...

Repeating

0.2222...

0.3333...

0.444...

non-repeating

0.12496876...

① Even no.

Any positive integer which
is divisible by 2.

Ex:- $2/4/8/10$ etc

odd no!:-

Any positive integer

अभाज्य सं

①

Prime no

Only prime no
which is
even no

having only 2 factor.

i.e 1 and itself

②

Smallest
Prime no.

Ex:-

2
Imp

3, ~~4~~, 5, 7, 11 etc
1 2 4

(માજા રાં રખા)
Composite Number:-

→ having more than 2 factors.

Ex:- 4, 6, 8, 9, 10, --- etc.



(2, 3) ✓ (#)

(4, 6) ✗

(8, 7) ✓

(8, 9) ✓

(5, 16) ✓

Coprime નો
(સાથે અભાજ્ય સંખ્યા)

Any pair
having no common factor
except 1

(H) Prime

(#) coprime

(H) composite

(H) Even

(H) odd



(#) Natural no. $\rightarrow$ Positive Integer

प्राकृतिक

संख्याएँ :-

used for counting

Ex:- 1, 2, 3, 4, ... ∞

गिनत

Whole No
(पूर्व संख्या)

0

1, 2, 3, 4, ...

Natural
no.

Terminating decimal $\longrightarrow$ Fraction [Rational number]

Ex: $\textcircled{\#}$ $0.\underline{75} \Rightarrow \frac{75}{100} = \frac{3}{4}$

$\textcircled{\#}$ $0.\underline{12} = \frac{12}{100} = \frac{3}{25}$

non-terminating
Repeating ✓

Fraction $\frac{p}{q}$
[Rational no.]

~~1~~ $0.3333\ldots = 0.\overline{3} \Rightarrow \frac{3}{9} = \frac{1}{3}$

$\frac{4}{9}$

~~1~~ $0.4444\ldots = 0.\overline{4}$

~~1~~ $0.62222\ldots = 0.6\overline{2}$

~~1~~ $0.81818181\ldots = 0.\overline{81}$

$\frac{81}{99} = \frac{9}{11}$

$\frac{6}{11}$

⑧ $0.6222\ldots = 0.\overline{62}$

non-bar digit

$$\frac{62 - 6}{90} = \frac{\cancel{56}}{\cancel{90}} = \frac{28}{45}$$

जितने digit + पे bar
जितने पे bar नहीं

$$\frac{28}{45}$$

#

#

$$0.344444\ldots = 0.\overline{34}$$

$$\frac{34}{90} = \frac{34 - 3}{90}$$

$$\textcircled{+} \Rightarrow 0.522222\ldots = 0.5\overline{2}$$

$$\textcircled{\frac{47}{90}} = \frac{52-5}{90}$$

④

0.42333---

④

0.84999---

④

0.24498989898---

④

0.29888---