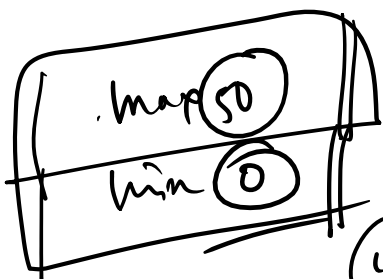


REAL ANALYSIS



10 balls

10

1.4 balls $\rightarrow 6 + 4 \rightarrow 10$

$10 \subset \text{balls} \subset 300$



WAR

~~Sup/Inf~~

$$u_n = \frac{4+n}{n}$$

$n \in \mathbb{N}$

$$= \frac{4}{n} + 1$$

GLB

LB

~~2~~

5

01

Sup

Inf

$$A = \{a_1, a_2, \dots, a_n\} \rightarrow \mathbb{Z}$$

$$a_1, a_2, \dots, a_n \rightarrow \mathbb{Z}^n$$

26

Arbitrary $\forall n \in \mathbb{N} \rightarrow \text{open set} \rightarrow \text{open}$

9062395723

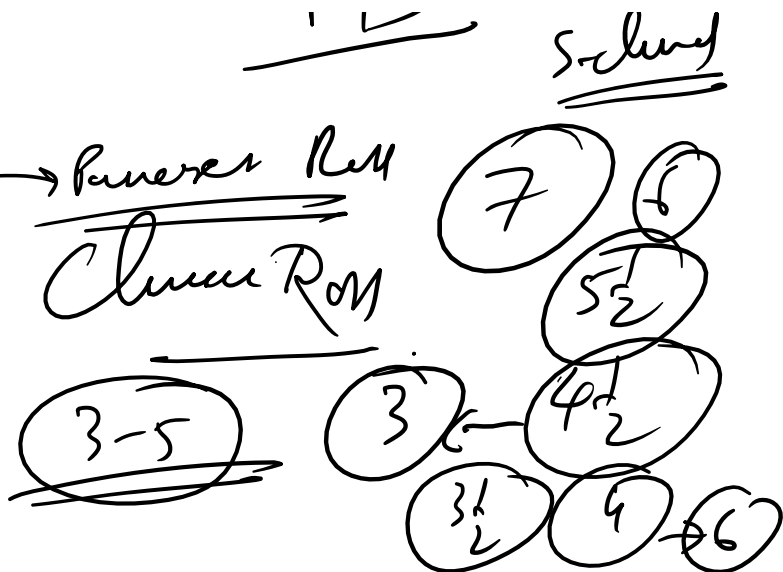
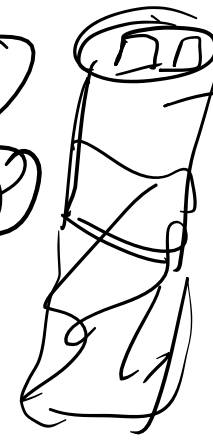
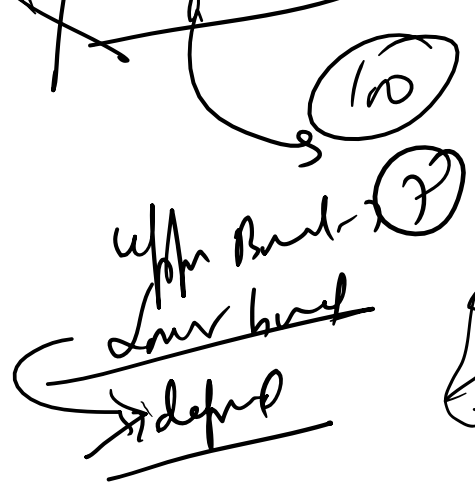
$\{1, 2, \dots, \infty\}$

Arbitrary Intersection \rightarrow closed \rightarrow closed

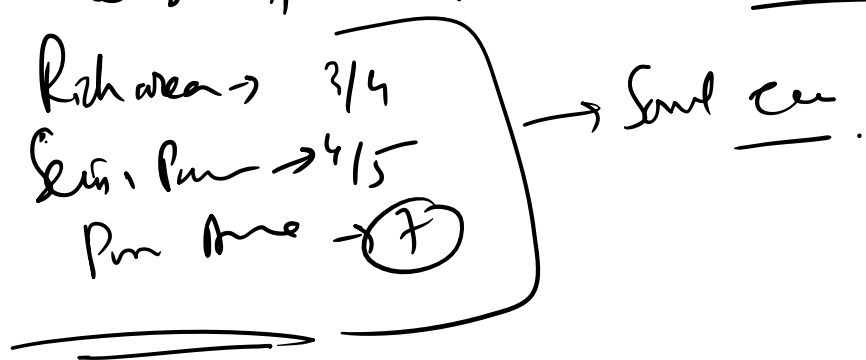
Neighborhood

R/S \rightarrow Real Analysis Sched

Neighborhood



Set of Limit part \rightarrow closed pts.



$$a_n \rightarrow \lim_{n \rightarrow \infty} \sup \sqrt[n]{a_n} = \alpha$$

$$\sum a_n \text{ Con } \alpha < 1$$

$$\sum a_n \text{ Div } \alpha > 1$$

Condensation Test

1977 6.5 to 60

Find references

Formula 1

Test 10 min

1965 ✓
1969 ✓

41-42



10 km/hr
100 km/hr
150 km/hr
260 km/hr



Lewis Hamilton
 250 350

150 m/hr
 360 m/60 min
 6 km/1 min
 6000 m/60 min
 60
 100 w/sec
 983

Time
 First
 True
 Home

$v_n = \{a_n\}$
 $\sum a_n$
 $\sum a_n 2^n$

$\left. \begin{matrix} 1, 2, \dots, \infty \\ 4, 6, \dots, \infty \end{matrix} \right\} \left. \begin{matrix} \text{---} \\ \text{---} \end{matrix} \right\} \left. \begin{matrix} \text{---} \\ \text{---} \end{matrix} \right\} \left. \begin{matrix} \text{---} \\ \text{---} \end{matrix} \right\}$

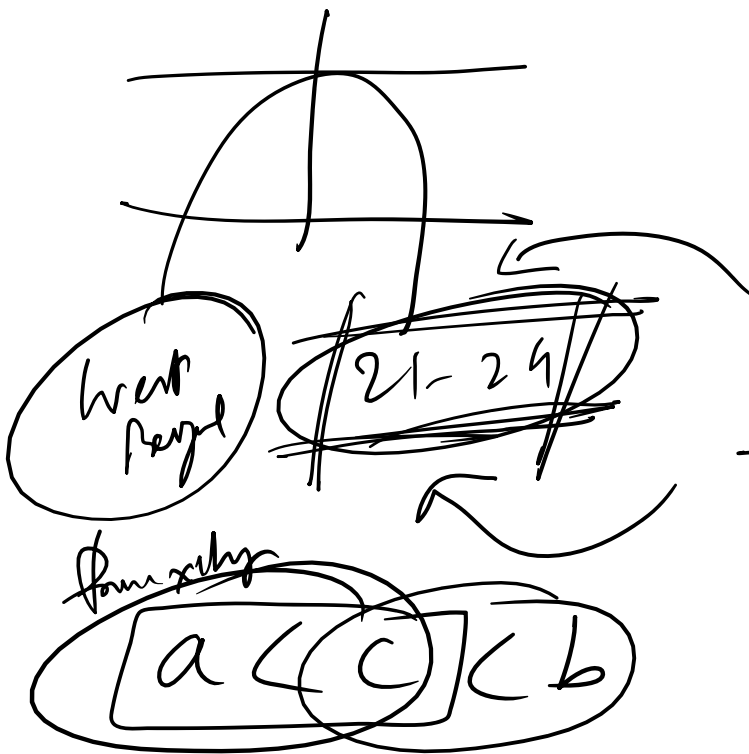
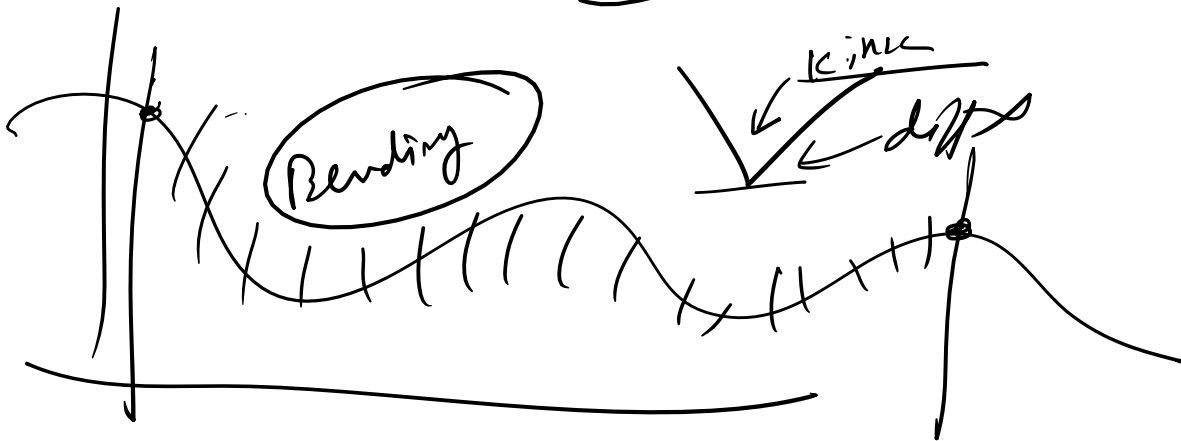
$f: A \rightarrow B \rightarrow \text{Cont.}$

Inverse image an open set \rightarrow open & Inv
 Cont \rightarrow closed set \rightarrow closed

Roué's
 (11) (10)
 (17) (20)

Space & time
 $\xrightarrow{\quad}$
 $\xleftarrow{\quad}$
 20

(17) (20)
21 years

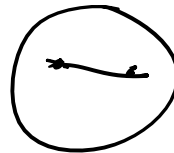
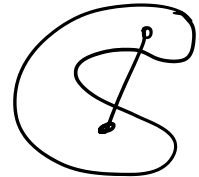
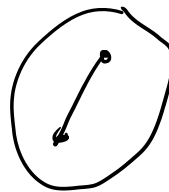
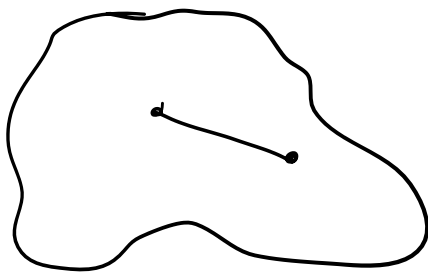
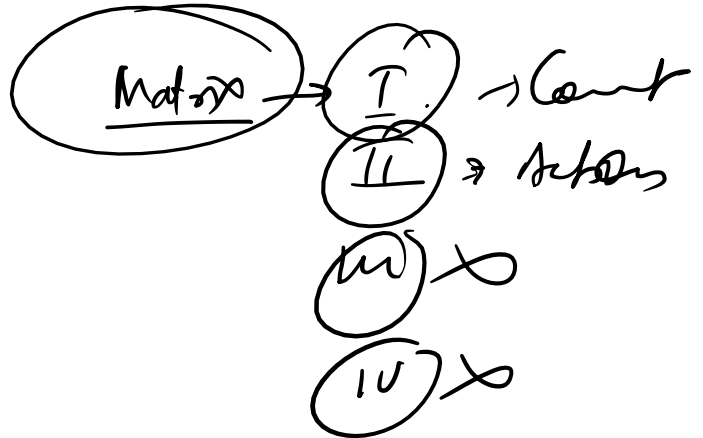


(a, b)
 $f'(c) = 0$

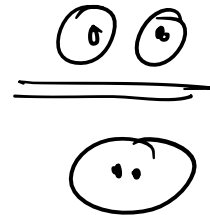
Random { 1, 4, 10, 20, 45, ...
 -1, 4, -63, 71, -193, ...
 45 1 (2)4

Number $\rightarrow -1, 7, -0, 71, -175, \dots$
 $\rightarrow e^{45}, -h77, (x^2)^4$ at the

Metric Space



$d(x, y) \geq 0$



$d(x, y) = d(y, x)$

$d(x, z) \leq d(x, y) + d(y, z)$

distanceless ness

$\mathbb{R}^k \rightarrow$

Comer \rightarrow Cenby

Au Comput mathe 8me +
Complete

~~TEB~~ Harmonique

9062395123