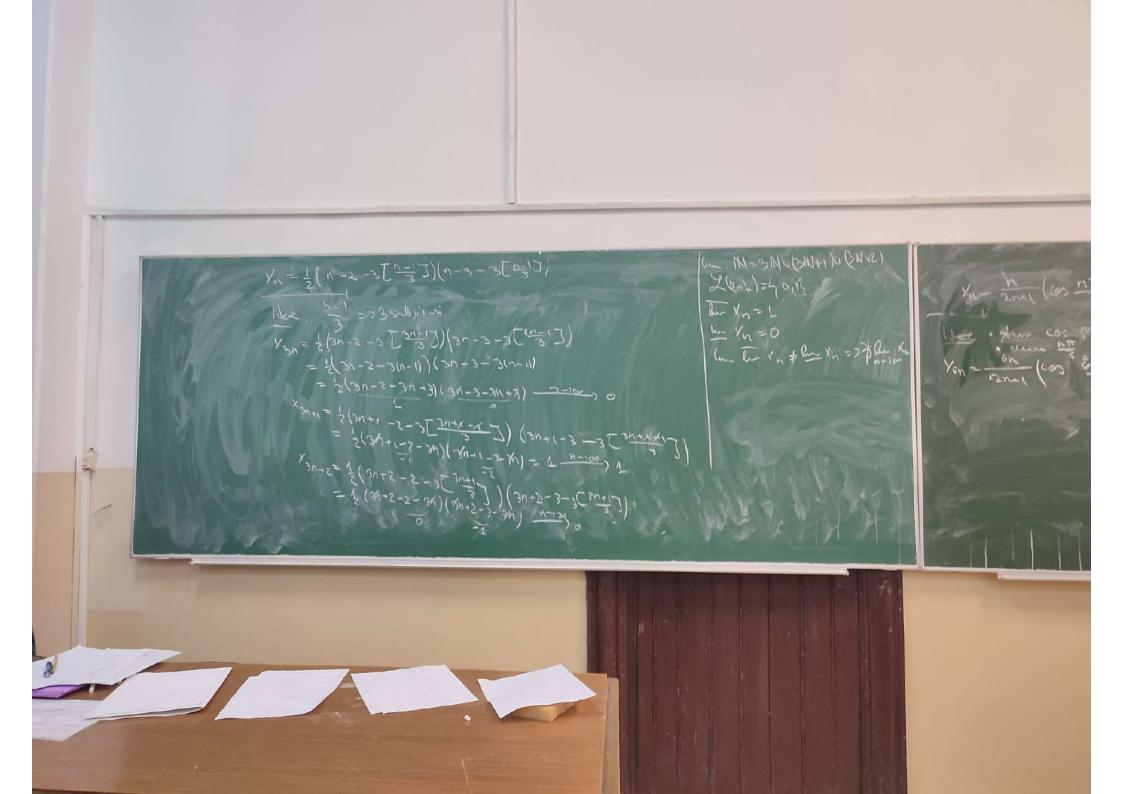
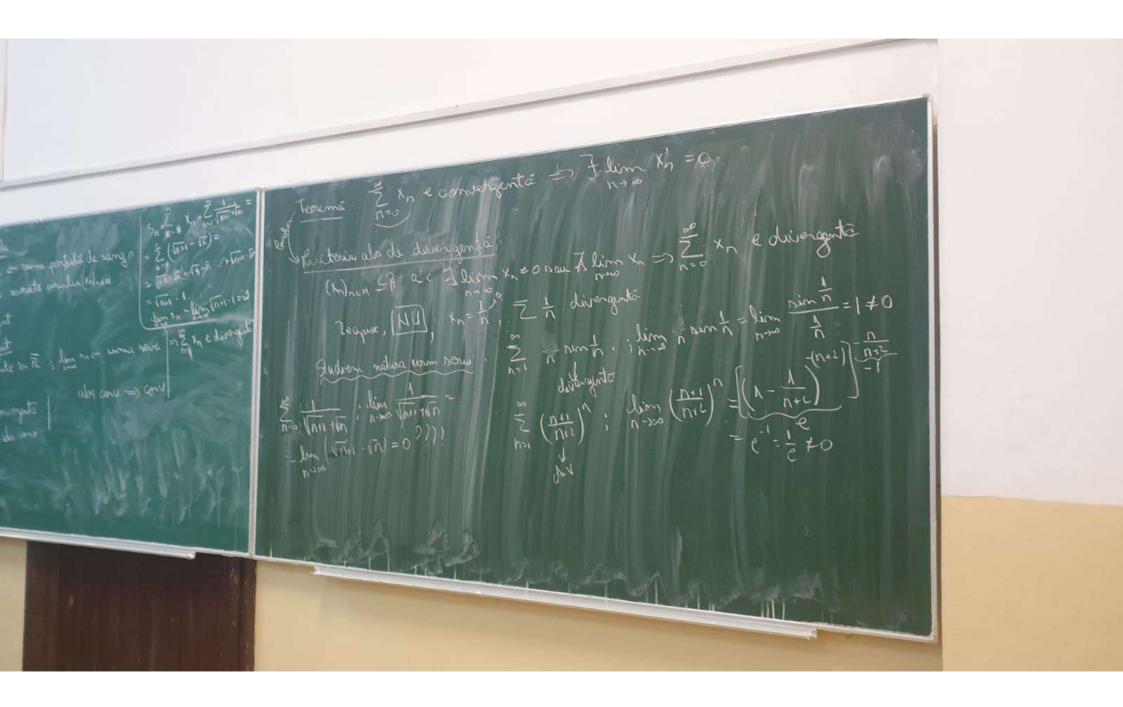
Timite extreme. X= got limiter daca & (Xnx)n C(Xn)n at line 2 = 4 X E PR X pt | Subject lu Xn = lu sup Xn. cel ma mare pet limita lin Xn = luinf Xn -, mic -, mic daca lin vn = lin vn atunci 3 lim vn

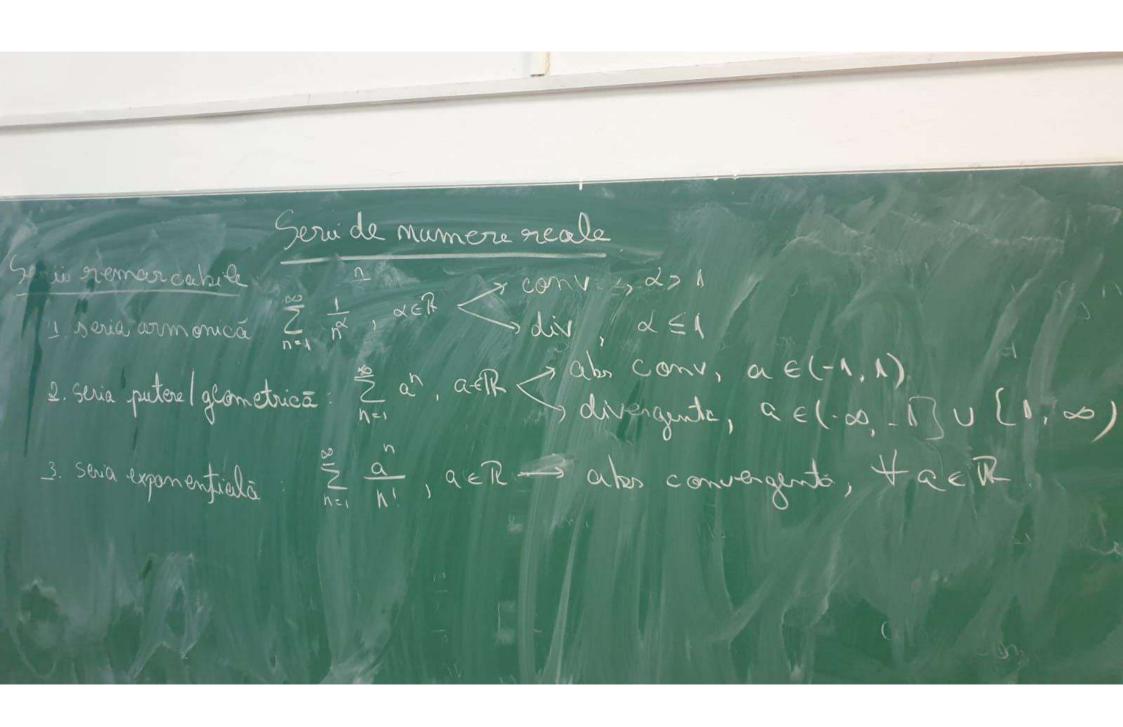


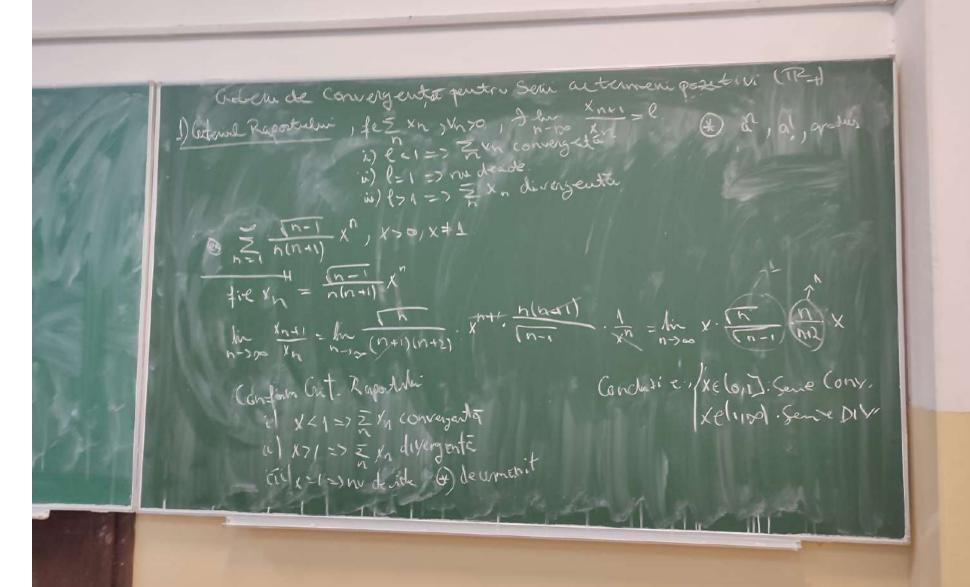


(Kn)ner, (Sn)ner) > Sn = \( \frac{2}{k} \tau\_n = \frac{1}{k} + \tau\_n + \tau\_n ≥ xn → convergenta daca (>,) ner e convergent e divergenta \_ e divergent are limite in R; lim not suma sever to suma in R alos conu => conv Expe also convergentà discă seria [ 1xn] « convergentà. ]

N=0 semi convergentà discà Experienti, dor me also conv







2) Grit Radicalidm, fre nema Z Vn, Vn 70, 3 lbm of Xn = l

i) l = (-> Z Xn converged a)

ii) l = (-> nu decide

iii) l = (-> z > nu decide

iii) l = (-> z > nu decide

iii) l = (-> z > nu decide fue xn - Vinnix nax - n) Lucy NVn= him (tennilinexi - n) = him tentilinexy - n= him hory nexi - n'2 (out out Radicalulus

(1) x+1 Radicalulus

(1) x+2 < 1 (ic. x < 1) -> Exx conc

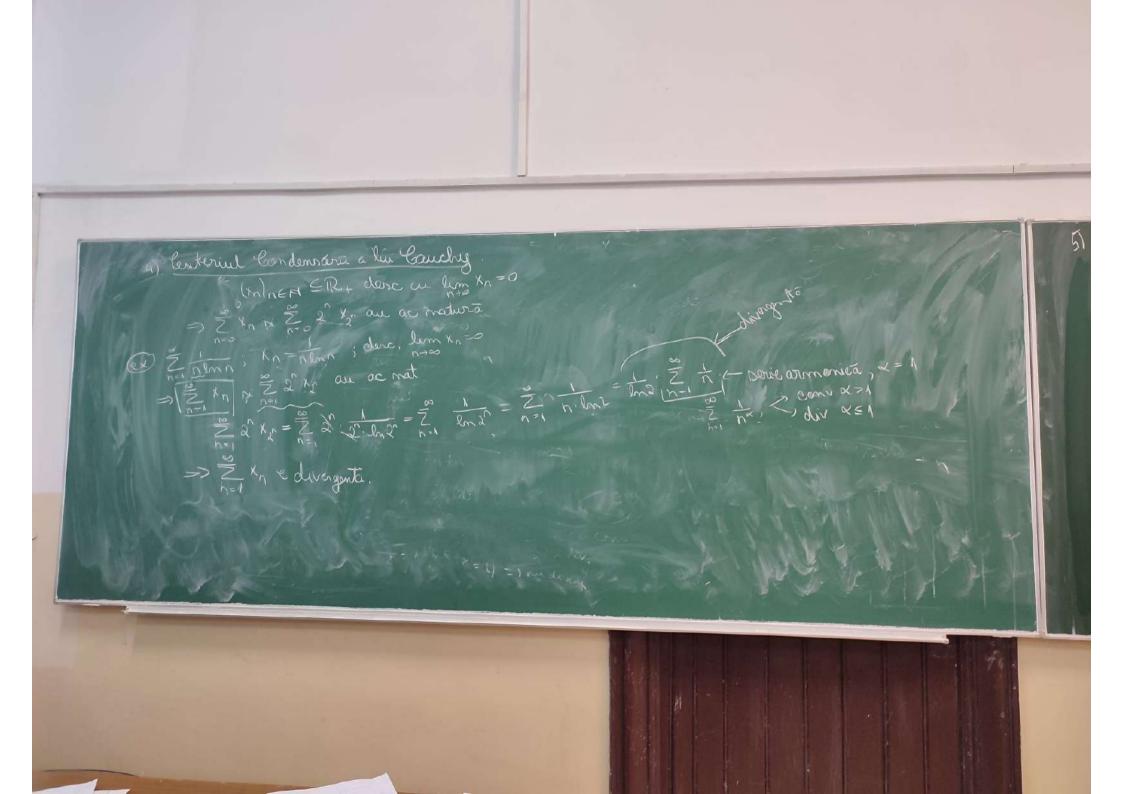
(ii) x+1 = 1 (ie. x > 1) => Exx n div.

(iii) x+1 = 1 (ie. x = 1) = 1 nu deade



X=1=1 Devia duine  $\sum_{n=1}^{\infty} (\sqrt{(n+1)(n+1)} - n)^n = \sum_{n=1}^{\infty} (n)$  divergetà (5 geom 0 = 1) of one stir. a eff. (ouchable x+(0,1)=> Suacan! X+(1,10)=> Sera Diregution. 3) Cantoil lui Raabe-Duhamel

ZXn = R+ a 2 3 lum (Xn-1) = LE R L(1=> Z x, diverguità SLX=> Z x, converguità Pt x=1; 200 10-1 ; RD. lim n. (10-1 (10-2) -1) -- lim n(m) 1.1) - lim n(n+2/10-1-10/10) > 5) Z / convergentà.



of but de Componente outregaldedi. Le Z xn, Zyn, xn70, yn70, Xn2yn i) Z Ja Convergenta => Z xa convoyanta

ii) Z xa devergenta => Z Ja direcgenta

iii) Z xa devergenta => Z Ja direcgenta

[III b] x Sinnx EL | 3n Sinnx

6) leit de comp on Limita ZXn 1, Z Jn 18h 70, Jn 50 Dlin xn - R. L) lelo, o); Z xn N Z Jn (aceui n at.)

ii) l=0, Z Jn consugent => Z xn consugent => Z xn dis. tie xn = 2nx 4 5 5 - him 3/ (-5) - 1 E (6,5) Conf (CL =)  $\sum_{n} x_n x_n \sum_{n} d_n$   $\sum_{n} d_n = \sum_{n} (\alpha_n)^n$   $\sum_{n} d_n = \sum_{n} (\alpha_n)^n$   $\sum_{n} d_n = \sum_{n} (\alpha_n)^n$ (R) = ) Sant Comment ent à ( 3 200m en ac(-14))