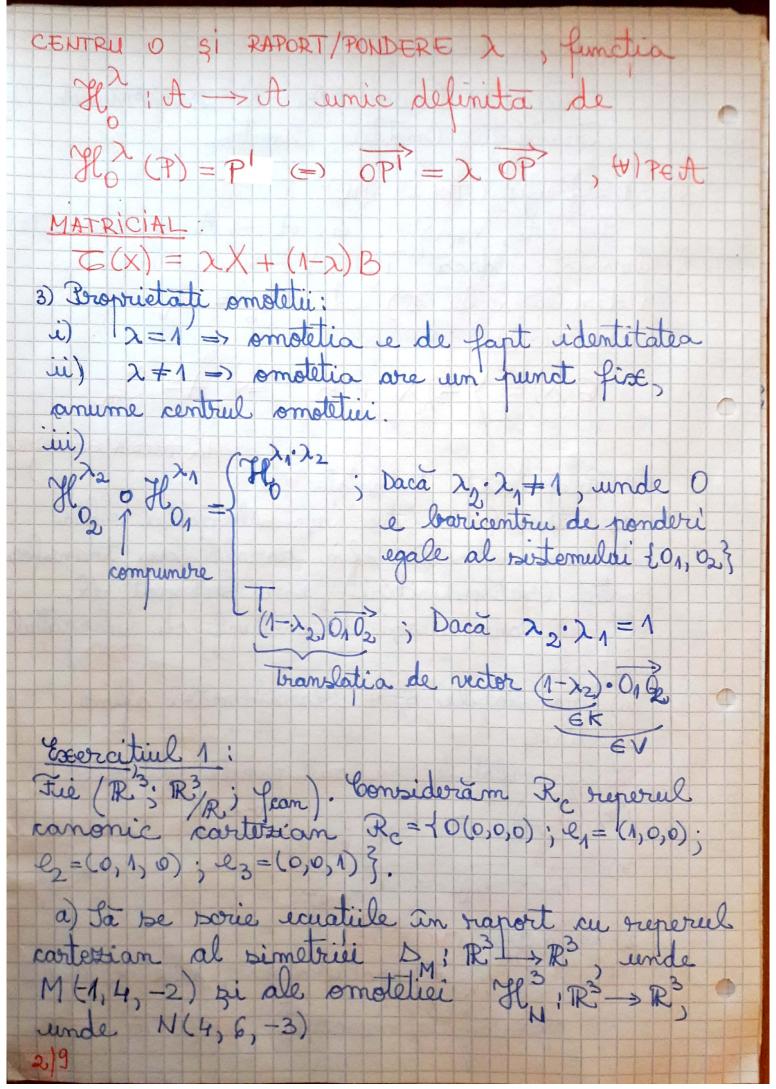
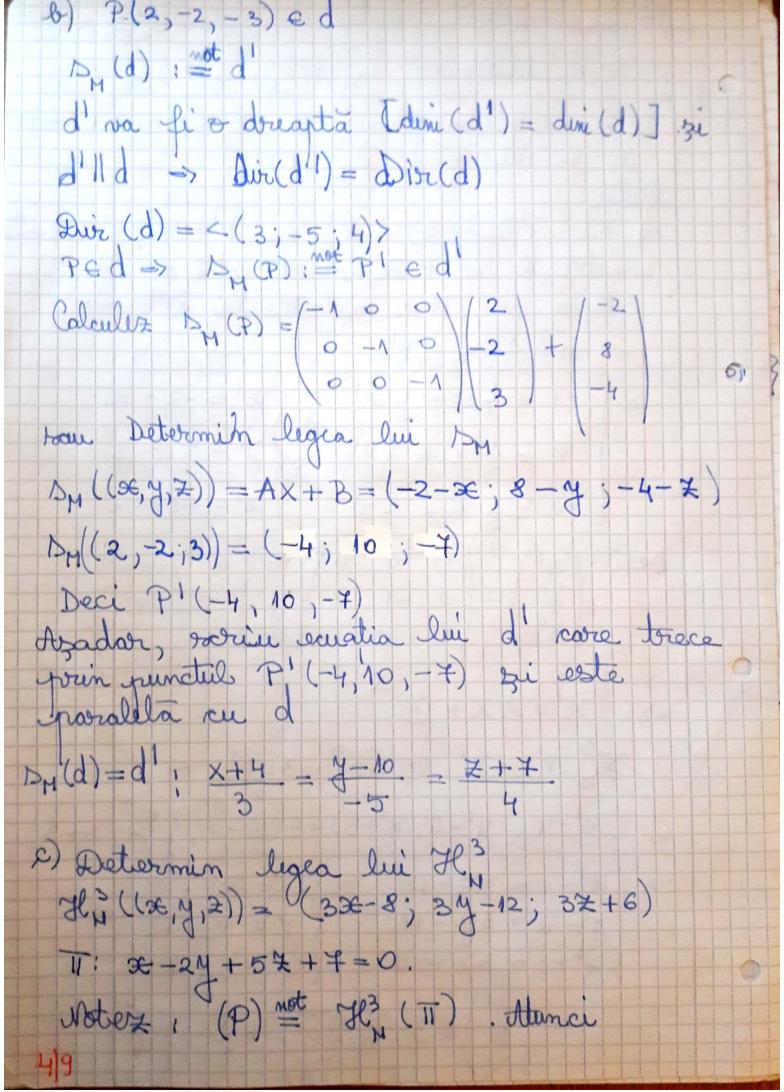
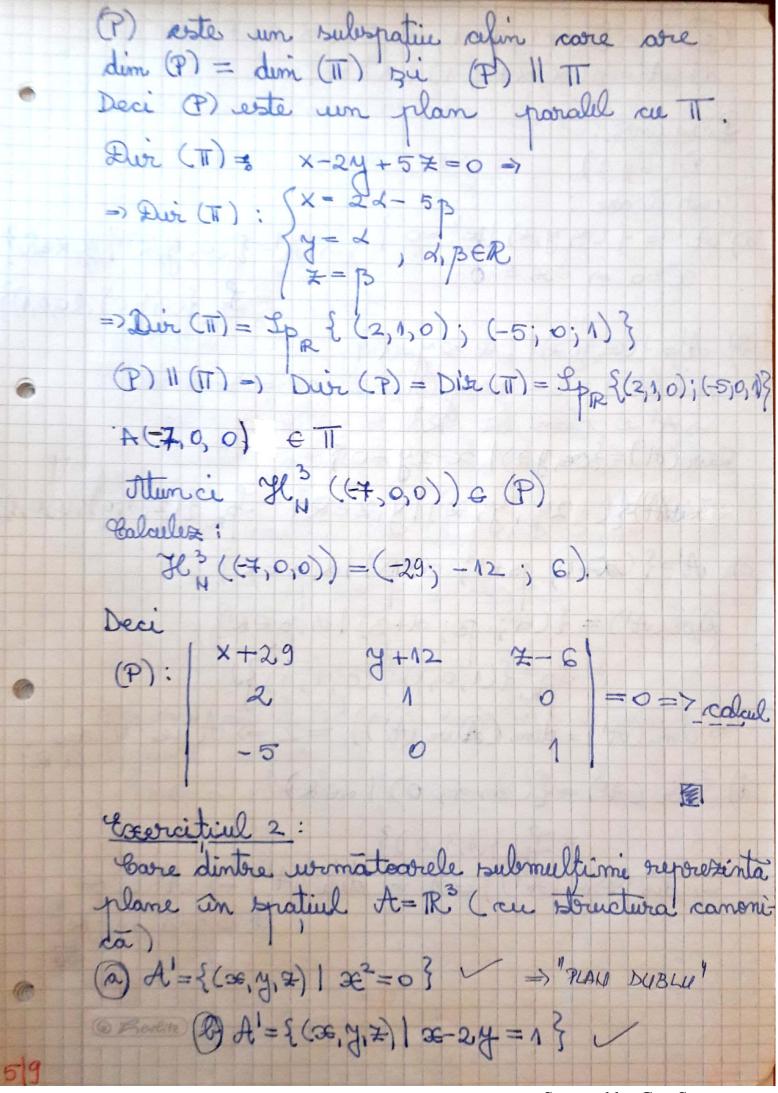
TAFALAN ALEXANDRU TUTORIAT GEOMETRIE - Nr 5 (SAPTAHAVA 6) Translatii amotetii Limetrii 1) Definitie (TRANSLATIE) Fie (A, VIK, J). 6: A > A se numerte translatie daca TZ: V > V (wima vectorialà a lui 6) este T= ldv MATRICIAL 6(X):= Y = X + B => A = Jm din TEORIA GENERAL 2) Brownietati translatii a) Otranslatie "duce" un subspatier afin untreun subspatie afin paralel au transfor matul (subsp. Linitial) ior subspatial obtinut are accasi dimensione de subspatial ii) Translatile sunt transformari afine lijective in Translatiile nu au puncte fixe v) To 0 Tw = Tr+w. 2) Definitie (OMOTETIE)

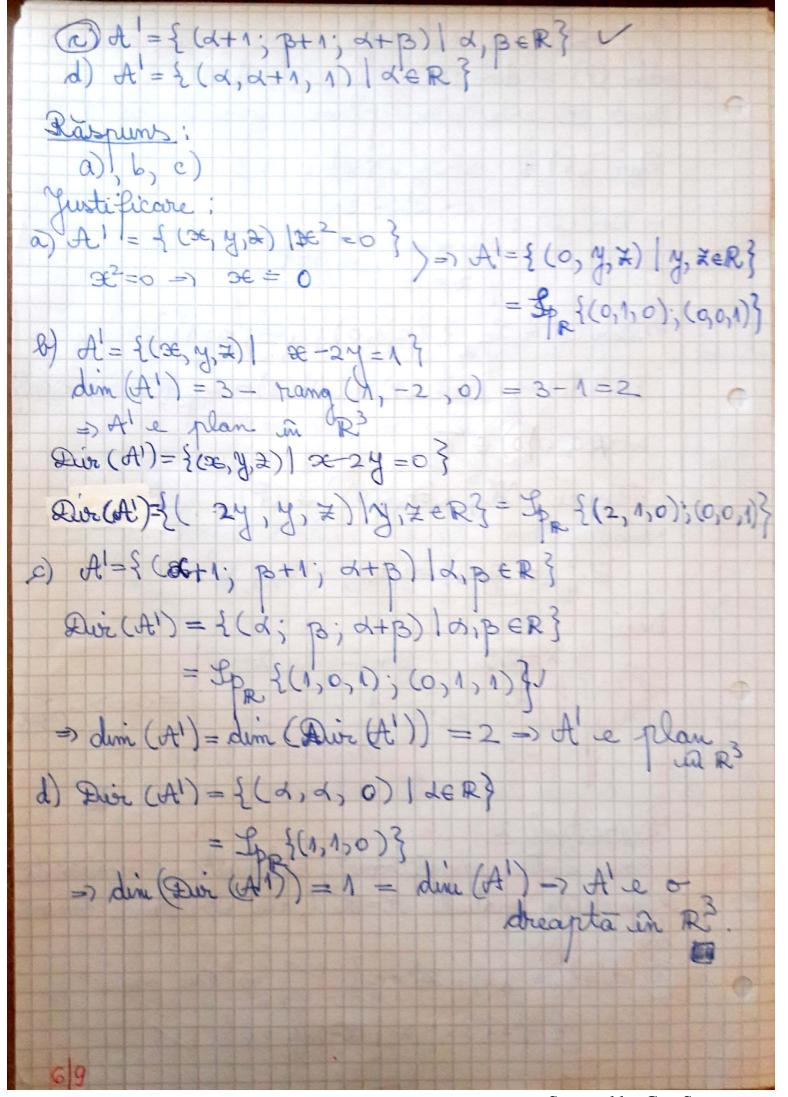
Fie (A, V/K, f) spatiu afin, 26K* si 06A fixate. Le numerte MOTETIA DE



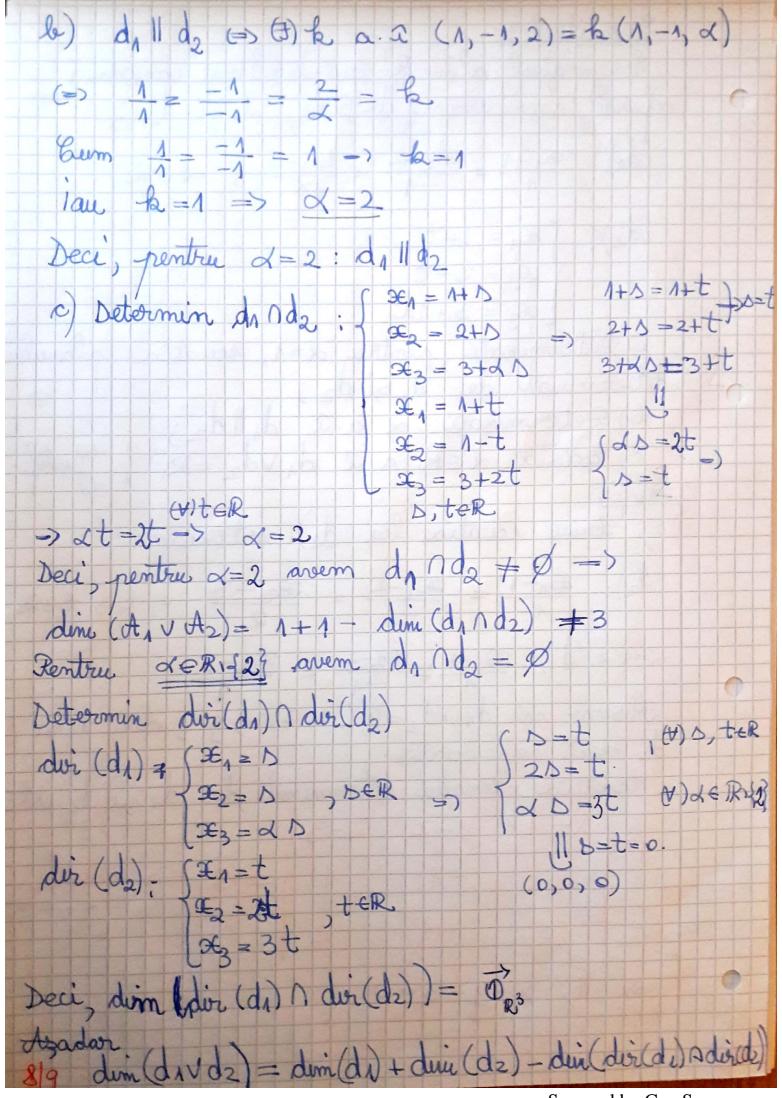
b) Le considera dreanta d: 32 = 4+2 = 2-3 La se determine is (d); 6 c) Le considera planul II: x-24+5x++=0. La se detormine H3 (II) Solutie: a) Fie P(x, y, 7) & R3 zi P'=(x', y', 7') este simetricul lui P in graport/fata de M them ca Me mijlocul lui PP' => => M= 1 P+ 1 P $4 = \frac{1}{2}x + \frac{1}{2}x$ $= \frac{1}{2}x + \frac{1}{2}x$ => | -1 = 1 = 1 = 1 Deci (x) = (-1 0 0) (x) + (-2) (x) = (0 -1 0) (y) + (-8) (x') = (0 0 -1) (x) + (-4) => X'= AX+B 2 (P) = P (=) NP ? = 3 NP (=) 6 (x'-4, y'-6, x'+3)=3(x-4; y-6; x+3) (=) $\begin{cases} x'-4 = 3x - 12 \\ y'-6 = 3y - 18 \end{cases}$ (=) $\begin{cases} x' = 3x - 8 \\ y' = 3y - 12 \end{cases}$ (=) $\begin{cases} y' = 3y - 12 \\ y' + 3 = 3 + 6 \end{cases}$ (a) (3) = 3. 73. (3) + (1-3) (6)

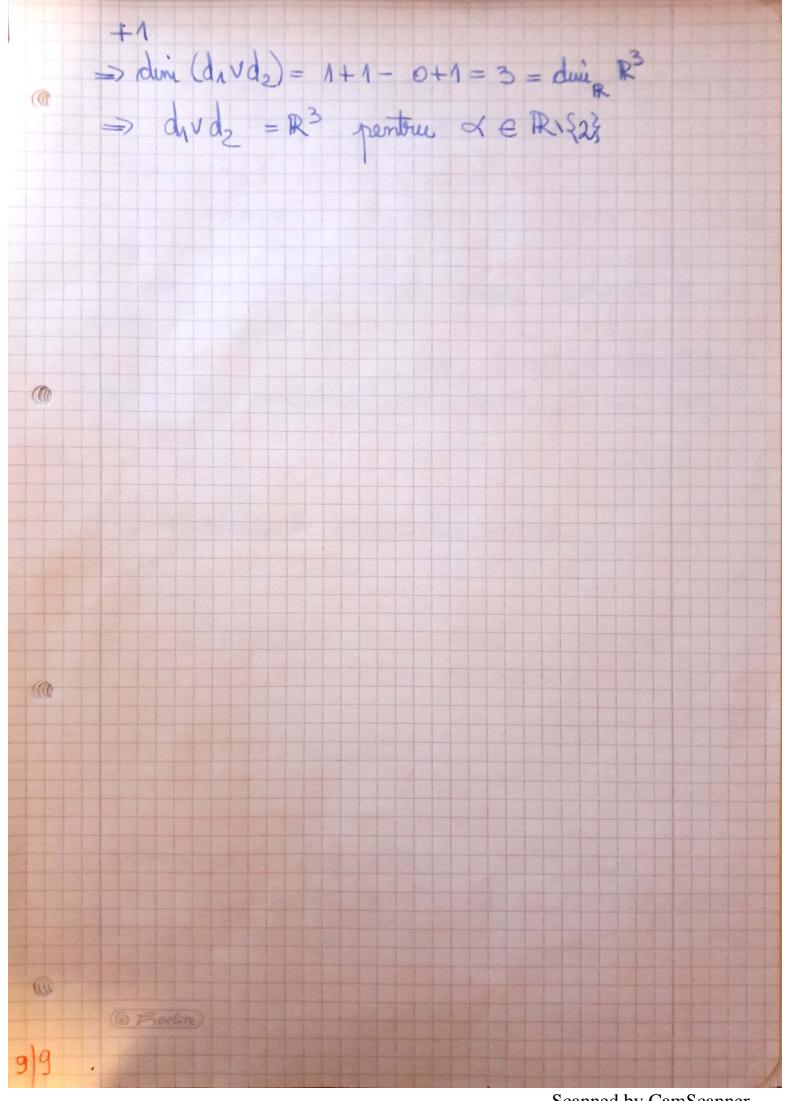






Exercitial 3: In spatiul afin R'au structura canonica afina consideram dreptile d, zi d2: (d_1) : $\underbrace{\mathfrak{E}_{1}-1}_{1} = \underbrace{\mathfrak{E}_{2}-2}_{-1} = \underbrace{\mathfrak{E}_{3}-3}_{1}$ $\alpha \in \mathbb{R}$ (d2): (\$\pi_1 = 1+t 7 x,=2-t 1 0Ez = 3+2t a) Determinati, pentru d=1, ecuatia planulii determinat de d, zi de ; b) Determinati & a. 2 d, 11d2; c) Existà d'eR a. 2 d, Vd2 = R3? Yustif a) Loin ecuatio lui (de) cortezion: $(d_2): \underbrace{\mathfrak{E}_{1}-1}_{1} = \underbrace{\mathfrak{E}_{2}-2}_{-1} = \underbrace{\mathfrak{E}_{3}-3}_{2} = t, ter$ $d=1 \rightarrow (d_1): \mathcal{Z}_{1}-1 = \mathcal{Z}_{2}-2 = \mathcal{Z}_{3}-3$ Observ ra d1 1 d2 = {P(1,2,3)} 3 deci d1 3i de sunt concurente. Ecuatia planului determinat de de su de este $\frac{1}{1} = 0 = \frac{1}{2}$ $\frac{1}{2} = 0$ $\frac{1}$ Berlin X+4-3=0.





Scanned by CamScanner