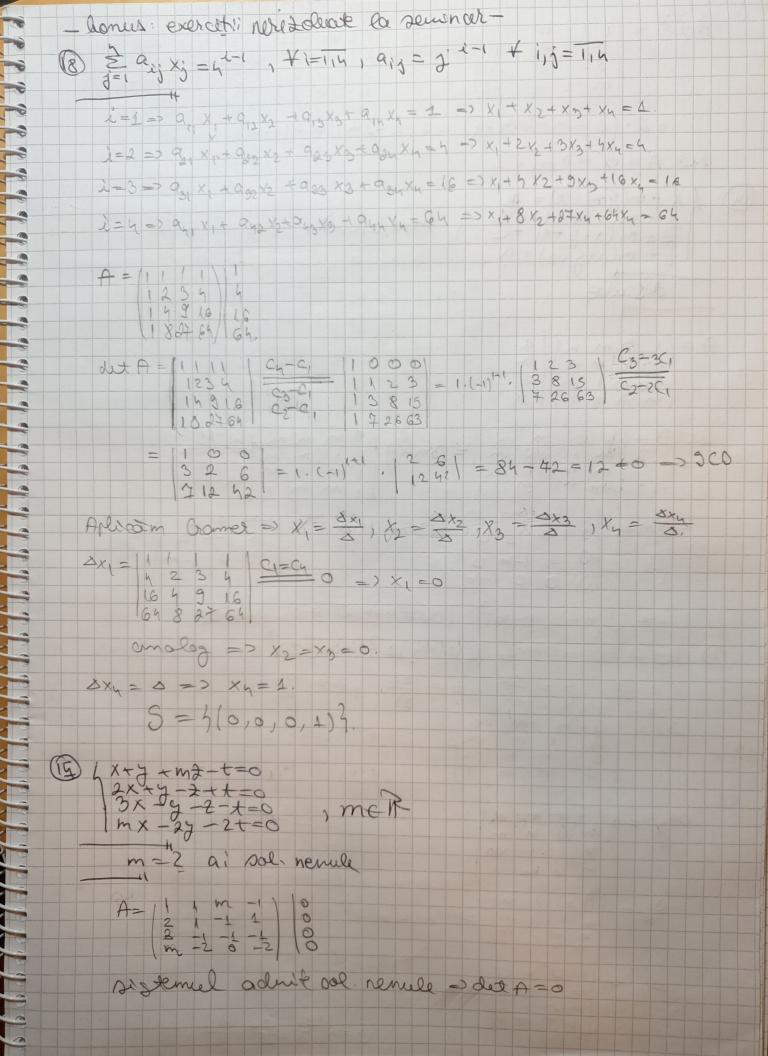
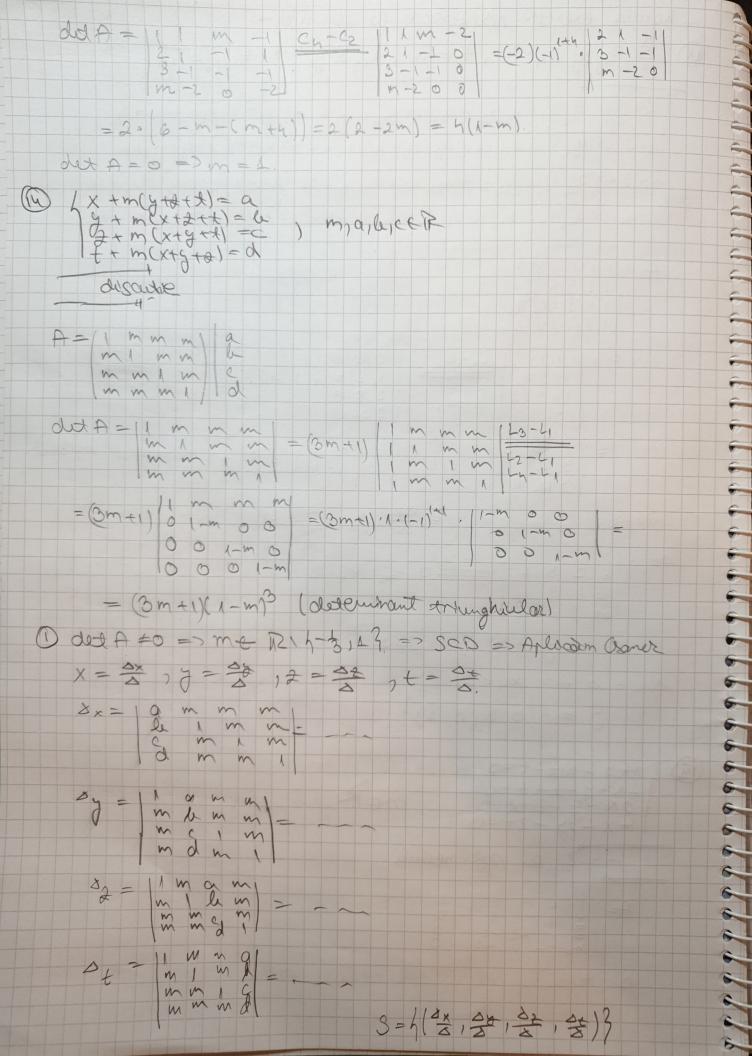
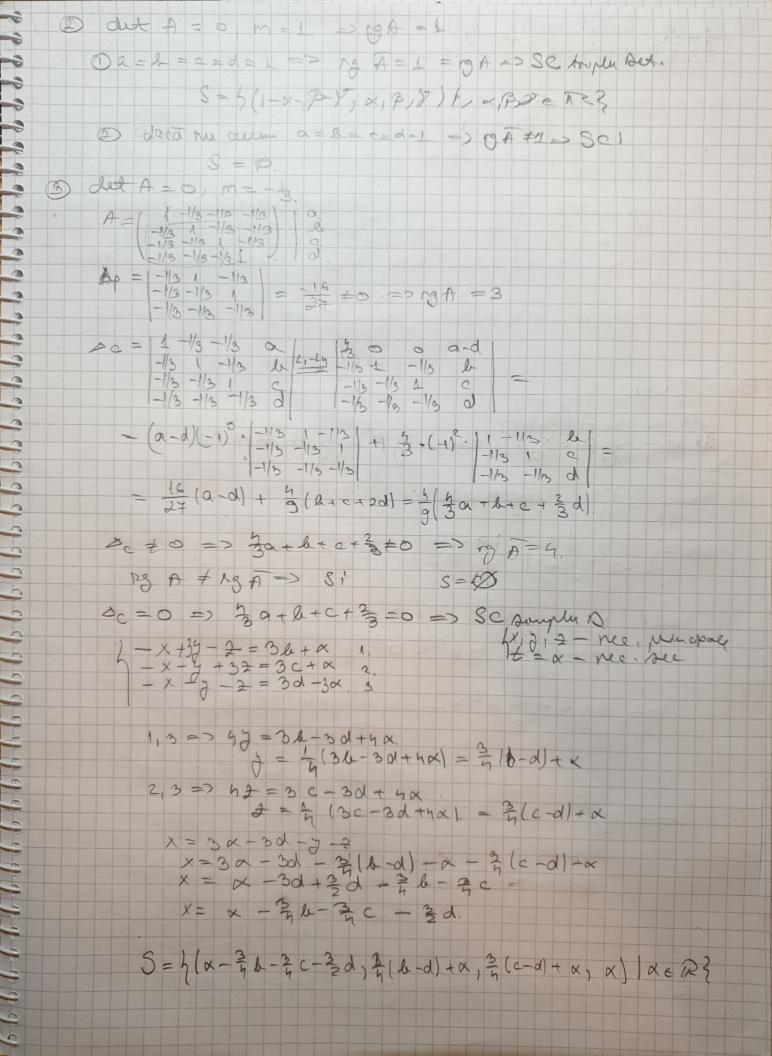


@ A = [a - b - a le & a -& -a C -d c -a d c d e det A = 4(a2+13)(c2+d2) + Laplace + | a b | (-1) +2+1+4, - d c | + | - a | - (-1) +2+2+2 | c - 0 | + | a - b | - (-1) +2+2+2 | c - 0 | + + - b b 1+2+2+4 c c + - a le (-1)+2+3+4 , c - 0 (= = (a+b2)(c2+d2)+0+(-a-b2)(-d2-c2)+(b2+a2)(c2+d2)+0+(a2+b2)(c2+d2) = 4(2+02)(3+02) 6 3 A= 4, (R), A= 02 PA = det (A - x Ja) pol caraol. PA (1)+ ... + PA (22) A= 40. A + dut A. J2 = 02 6 A A - dut A 72 = 02 A = Olt A J  $P_{A} = det(A - XJ_{2}) = det(\frac{detA}{derA} - X)J_{2}) = \frac{detA}{derA} - X$ A=02 => (del A) = 0 => ad A =0 7/11 + + 9/(22) = 12+...+22 = 22.23.45 = 11.23.15 = = 379 5







@ fe Ac In(R) o matrice gA=1 Jack al B- XA  $BA = 1 \Rightarrow A = \left( \frac{1}{2} x_1 - \frac{1}{2} x_2 - \frac{1}{2} x_3 + \frac{1}{2} x_4 - \frac{1}{2} x_4 + \frac{1}{2} x_4$ Jan Man . . . . . May a A= (ax - ax m / ax - ax m = ax m (ax x + an x n) - ax ax (ax + ax m x n) 5 = (X1 X1 + ... + Xn Xn) (X1 X1 - X2 Xn) = (XA) (X = (XX1+ ... + Xn Xn) Janke --- Axx 9 AE 42(1) a) ex. ai 28 A = 28 (A2) alua 13 A = 18 A × ne NI a) A= (1-1) 120 n= 1 A=(4)(11) = (88) = 78A=0 => 8A+0A2 W. cati. rgA=rgA=0 => A=02 emidnet rg (m)= 0=rg (A) \* neMI Cafo: no 4 = no 45 = 7 => 4= x4 (ex. 8) A= xn-1.A=> => rgA = rgA + n ENI C923: rg A = rg A2 = 2 ) A = (2 2) del A - (del A) 1 d - 1 + 6. 10 H=2 > duA+0 => (dulA) +0 => detA +0 => rg A = 2 = rg A + neul => Date of A=13 A, alusi 13 A=15A + neNI