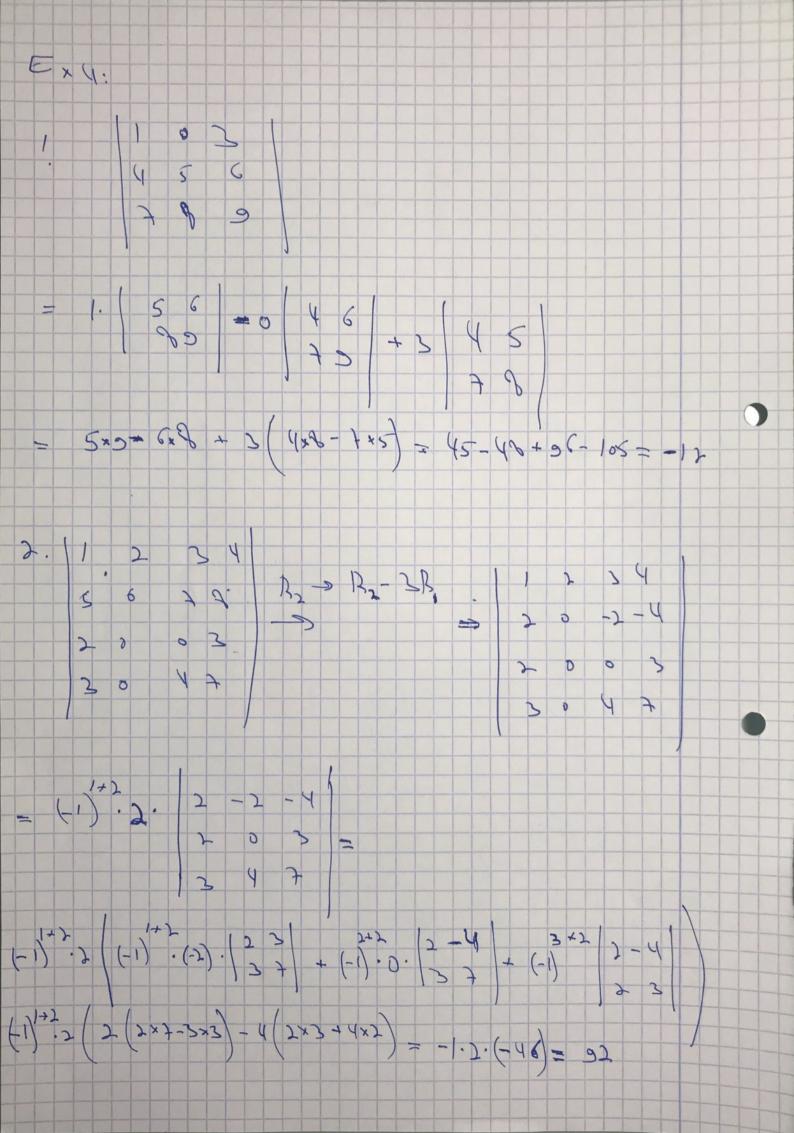


Exx: 1: (-1,1,2) + +(3,2,4) flane: 2x+3-3=+4=0 We use the horkal rector of the sirch plane + the differtional rectif of the line as directional Voctors of the Plane + (-1,1,2) as a point or the plane thus: TT = (1,1,2) + + (2,2,4) + 5(2,1,-3) x=-1+3++2=337+2=5+10+ x=-1+3++2=32-x=3-+6 x=-1+3++2=32-x=3-+6 => >>+== 5+10(35-x-3) = 32+5+20x-30 0=2++ 5+CF1 = X01 C=

Ex3: 1: 7,-5,-2) -+ (2,-2,-3) A(1,2,5) let's B be a point on the line thus, B: (7+2+,-5-2+,-2-3+) BA= (1-(7+2t), 2-(5-2t), 5-(-2-3t) BA = (-6-2+, 7+3+) the shortest listance will be when BA perpendicular to the like so: (-6-2t / 2) = 0 1 -3 + 1 -3 = 0 -12-9t=0 -17t=47=4=-47 x = 7+3 (-17) = 35 S= -5-3 (-4+) = 17 5 - - 5 - 3 (-1/4) = B= (25 9 107)



1) bet (AD) = bet A. bet B = det A. (det B) = Let B 2) det (AB) = det A det B \$ 0 => Sot Atooks Ext B to => 4 and B are hoh-sits which bean that they are Tow equivalent to I and from I it is Possille to set to A or B by clerent row operations 50: A => I => B 3) AB=0 A hos A-1 => A'. A.B = A'.O => I.B = O => B=0

Ex 6: 1. It's create a matrix A Serines by the The set A is theoriented volume of the Parallellepipet définéed Ly the vous/columns of 2. AR = (1,3) A= (3) A= (3)
the abs bet 3 2 2 2 1/2 beb 13 half will be the area of the triunde (half the orientell orea of the forallelosten defined by the row of the Jet A = 32 - 2x1 = 7 the triubale area = = 3.5

