Homework 5 Problem 1) a) / Va ER a \$ = = = Da = a -> | = = 1 for +413 to hold a D = = a + 2 - 1 = a -> 2 - 1 = 0 -> 2 = 1 17 3 - T = (4+4) T (+4, T = 4, T = + (4, -8) T = - (3, T = - (4, -8) T = 2 €a=2+a-1= a → 2-1=0 → 2=1 & Problem 1) b) Va E I, 76 E I 9 a Ob = 6 Oa = Z , Find b. 1b=2-a Z=1 from part a) P. LL 21/2 a 0 6 = a + b - 1 = z = 1 6 0 a = b + a - 1 = 1 a + b-1=1 2 b + a = 2 a+ b= 2 - a - b= 2-a Problem 1) c) Show that @ commutes. WEBL & CA C ⊕ d = c+d-1 = d+c-1 = d ⊕ c Problem 1) d) u EZ, u = = 1 9 a O u = u O a = a, Ha EZ. Find u. T = (k+4) (k-1) +2k+1 - 4K (K-28 + 2k-2) + (4K-3) (K-3) a Ou = a + u - au = a uOa = u + a - ua = a u-au=0 | u-ua=0 | u=0 u(1-a) = 0 u(1-a) = 0u=0 /