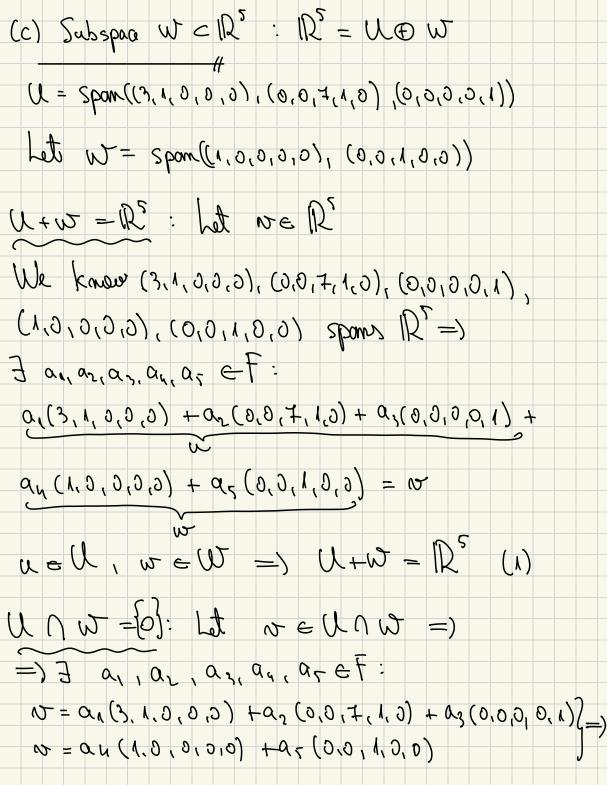
(1,0,0,0,0), (6,1,7,6,0), (0,0,0,1,6), ed Sporms U and is also linearly independent =) a basis in U (b) Extend B to be a basis. of R. B=[(3, 1, 0, 0, 0, 0), (0, 0, 7, 1, 0), (0, 0, 0, 0, 1)] · We add (1,0,0,0,0) which & spom(B) [(c,g,c,o,),(i,o,0,0,0),(c,1,+,0,c),(c,o,o,x,r)] = { woll · We add (0,0,1,0,0) which & sporn (B). (66,6,6,1),(1,0,6,6,6),(6,1,7,6,0),(6,6,6,1,E))= & col (8,0,1,0,0)} Now, we extended B to a basis of R? The list of 5 vectors one lin. independent => spor IR?

W = {(x, x, = 7x, x, = 7x, x)

(a) Find a basis of U



$$(1,0,0,0,0,0,0) \neq 0 = 0 (0,0,1,0,0) + 0 \neq (0,0,0,0,0,0) = 0 (0,0,0,0,0,0,0) + 0 \neq (0,0,0,0,0,0) + 0 \neq (0,0,0,0,0,0) + 0 \neq (0,0,0,0,0) + 0 \neq (0,0,0,0,0,0) + 0 \neq (0,0,0,0,0) + 0 \neq (0,0,0,0,0) + 0 \neq (0,0,0,0) + 0$$