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classic crossed pages
CF 445
                                         Transk a factor of
Qu17 # 7
1) y [n] = - x[3n]
                                         1-15 X + 10 1 KC :
assume: x, [n]
 y, [3n] =-x, [3n] ; shipt
                                     [T-1-1-10] xx + [T-10-11,x2 = 1]
 y,[n-T] = -X,[3n-T]
let z[n] = x,[n-T]; check if time-
   ZENJ -- ZEanj; subortifute: The Transpire + [Transpire =
  1-1-10=7,- X+[3(n=T)]: + [1-70-00], x + [740-1,12 =
         = - x,[3n-3T] # - x,[3n-T] takened - smil til
       .. Not Time - Invariant, NOT LTI
 2) y[n] = 2+x[n]
inputs
  assume: x, [n], x2 cn]
   4. [n] = 2+ x, [n]
   42[n] = 24 X2[n];
ay, [n] + 6 y2[n] = a(2+ x,[n]) + 6(2+x2[n])
  let Z[n] = ax,[n] + bx2[n]
     z[n] -> 2+2[n]
          = a + ax_1[n] + bx_2[n] \neq a(2+x_1[n]) + b(2+x_2[n])
     .. Not linear, Not LTI
3) yln] = n(xtn])
   assume: x,th]
    yitn = n (xitn]); shift
    y, [n-ī] = n (x,[n-t])
  let z[n] = x,[n-T]; n=pn-
       (tris) a deling
           = (n-T)(x_1[n-T]) \neq n(x_1[n-T])
      .. Not Time-Invariant, Not ITI
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4) y[n] = 2x[-n] + x[2n-1] assume: X, [n] y,[n] = 2x[-n] + x,[2n-1]; shipt land in the f told the state of the y, [n-] = 2x, [-n-] + x, [2n-1-] let 2[n] = x,[n-1] ; n=> n-T 2[17] -17 2元[17] + 2[21-1] =  $2x[-(n-1)] + x_1[2(n-1)-1]$ = 2x,[-n+T] + x,[2n-2T-1] \ 2x, [-n-T] + x,[2n-1-T] .. Not Time - Invariant, Not-LTT The transfer of the same