

3 Poly nomial for

For detined by relation

x (h) = [ an + or k 70

60 FOT K < 0

is poly nomial for

By deen of 1-tionsform

2 [x(K)] = 2 x(K) 3

1/- 0

K=0

 $\frac{2}{3}$ 

 $= 1 + \left(\frac{3}{4}\right)_1 + \left(\frac{3}{4}\right)_2 + \left(\frac{3}{4}\right)_2 + \cdots$ 

=) 1

1-0 for | 1 | c 1

=1 2 1 3 -0 101 13 1 70



: 7 [01] = 3 for 13170

RDG lies Durside of circle 131= a

In particular.

(1:1)

1 [1] = [1] 5

Q: -1)

f[(-1)] = 3

STREAMENT F X 2 A

3 Exponential for

discrete time denoi is it is kind a name

poat for till

for 3 t 4 0

is exponential for

MIDTED 1 - 5 10 0936 VB

L Fo defined by x(t) =

1277 .

K= 0

K= 0

 $= \frac{1}{1 - e^{-0.7}z^{-1}} = \frac{3}{3 - e^{-0.7}}$ 

- 7 [ e-at ] = 3 - e-at

[ 00 9 ] 5

variable

AUDDED

rollopic 7[0-0x] = 3 (a) 8 4 Dilac - Della to S(K) t to defined by & (K) = 1 1 for K=0 0 for k \$0 of Diloc-Dolla zi 7 [8 (N)] = " S 8 (N) 3 - N By Alfa = 8(0) + 8(1) 3-1 + 8(2) 3-2 + ... = 1 + 0 + 0 + 0 - ... 1 = [(1)1] + ·· 6 unit- Ramp fn L pr defined by x(t) = it for t no 0 10110

unit- kamp fo.

e sinuspidal fr

1011

Fo defined by x(t) = [ sinut for t 720

1et x(t) = t"

is sinuspidal for 11

2- transform of to where 'n' is the

integer

x (KT) = (KT) 0 -1 1 = 1 2

+ ayesi NT 18 replace

t midicalt-t to app vd

7 [x(t)] = 7 [x(KT)]

= 3 x (KT) 3-K

1 - [1/1/1]

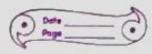
- = X (3) - (1) (17)

 $(KT)^{n}3^{-k} = X(3)$ K = 0

= [ [ ] ] =

K=0

(i)



YITDIIMIL. 7 [+1·1] = 5 (KT) 3-K K= 0 NOW. diff both sider witt ig, we get d [3 (+0-1)] = d [ = (KT) 0-1 3-K] = 3 (1)1-1 d (3-11) K=0 = 2 (K1) (-K)3-K-1  $\frac{2}{2} \frac{(k7)^n}{k7} \frac{(-k)^{3-k}}{3}$ -1 = (KT) N 3-K

1

d [7 (+n-1)] = -1 x (3) [from eq ill 43

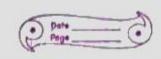
=1 X (3) = -T3 ( 7 [+n-1] 103

: + [ta] = - T3 d (T7 (ta-1)] 43

1=1 toq 7 [ +7 = - 73 d [ 7 ( +0 ) ]

13

(3-1)-1 - 3-1 ...



$$= - \frac{1}{3} \frac{3}{(3-1)^{3}} \frac{3 - 1}{(3-1)^{4}} \frac{3 - 2(3-1) \cdot 1}{(3-1)^{4}}$$

$$\frac{7 + 7 + 1^2}{3 + 1^2} = \frac{7^2 \cdot 3 + 1 \cdot 7}{(3 - 1)^5}$$

