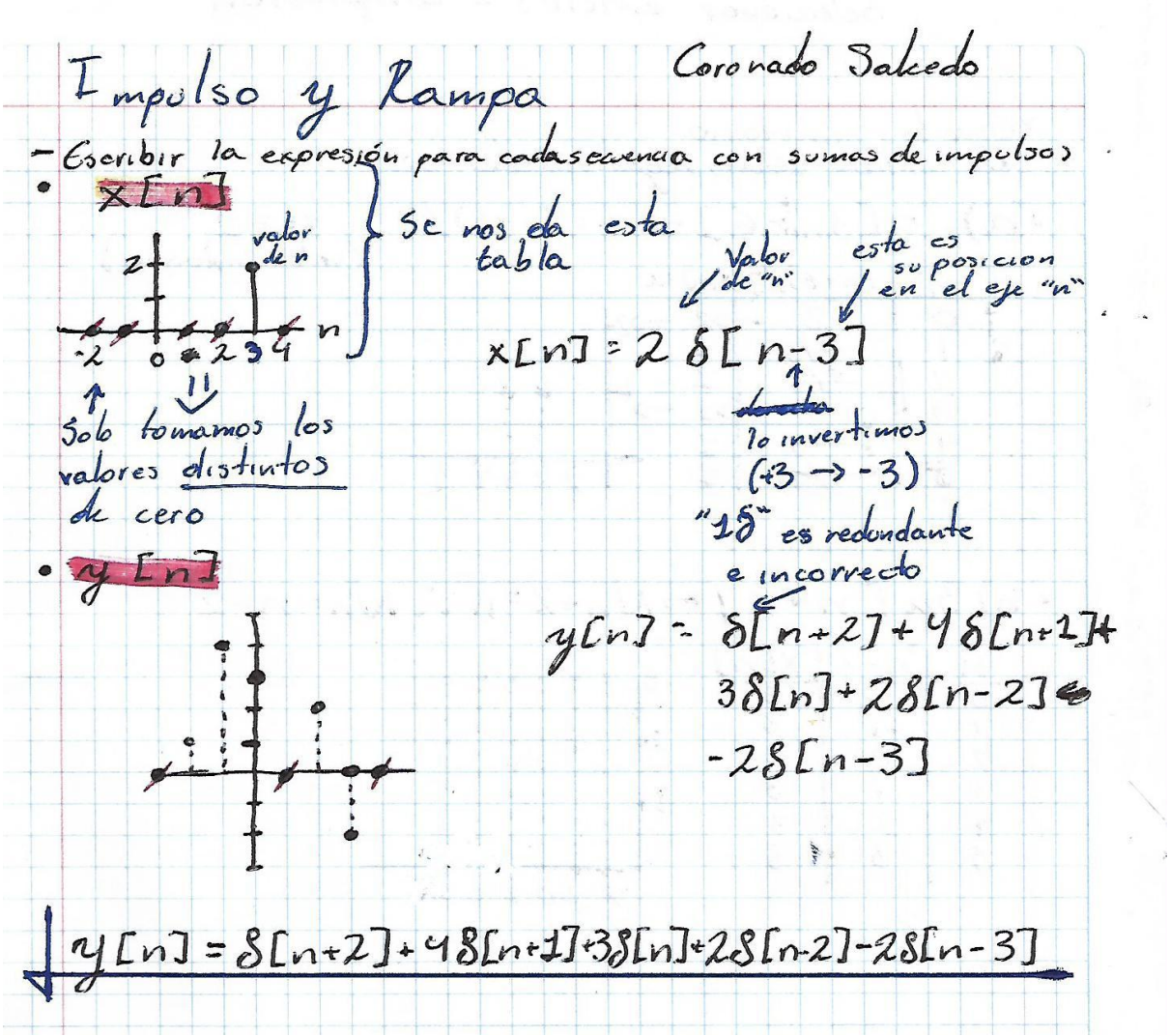
Coronado Salcedo Fabricio Noé - 18310065
2 de marzo, 2021

Impulso y rampa

- *Ejercicios, diapositiva 2*

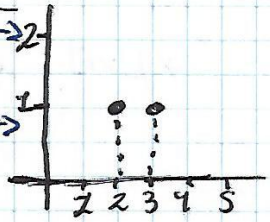


- *Ejercicios, diapositiva 6*

> Escalon unitario
No utilica valores negativos de "n"

• a) $u[3n-6] \rightarrow n = (n+6)/3$ $\quad u = 1$ (valor unitario)

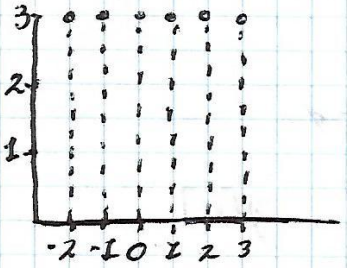
n	(n+6)/3	x[n]=u
0	2	1
1	~~7/3~~ *	1
2	~~8/3~~	1
3	3	1
4	~~10/3~~	1
5	~~11/3~~	1



* discreto = enteros unicamente

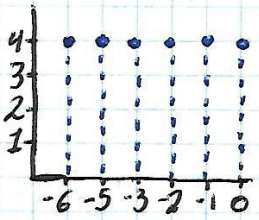
• b) $3u[n+2] \rightarrow Nn+2 = n \therefore Nn = n-2$

n	n-2	x[n]
0	-2	3
1	-1	3
2	0	3
3	1	3
4	2	3
5	3	3



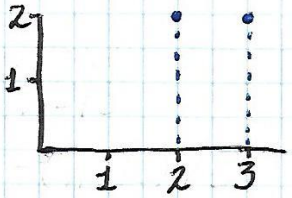
• c) $4u[-n-1] \rightarrow -Nn-1 = n \therefore Nn = -n-1$

n	-n-1	x[n]
0	-1	4
1	-2	4
2	-3	4
3	-4	4
4	-5	4
5	-6	4



• d) $2u[-5n+15] \rightarrow -5Nn+15 = n \therefore Nn = -(n-15)/5$

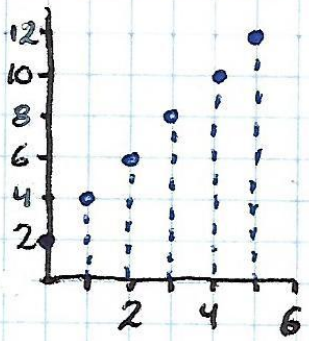
n	-(n-15)/5	x[n]
0	3	2
1	~~14/5~~	2
2	~~13/5~~	2
3	~~12/5~~	2
4	~~11/5~~	2
5	2	2



- Rampa

a) $2r[n] \rightarrow n = N_n$

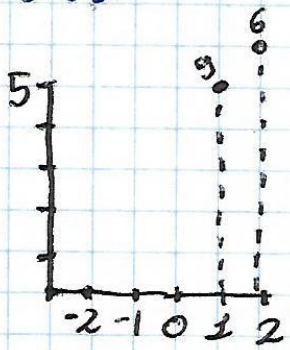
n	N_n	x[n]
0	0	2
1	1	4
2	2	6
3	3	8
4	4	10
5	5	12



b) $r[n+3] \rightarrow N_n = n-3$ ∴

n	n-3	x[n] impulso
~~0~~	~~-3~~	~~1~~ *
~~1~~	~~-2~~	~~2~~ **
~~2~~	~~-1~~	~~3~~ **
~~3~~	~~0~~	~~4~~ **
4	1	5
5	2	6

≡ 5



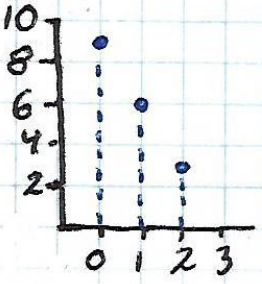
*no tomar el valor de n=0

**Solo graficamos $N_n \geq 1$

columna "n-3"

c) $3r[-n-2] \rightarrow -N_n - 2 = n$ ∴ $N_n = -n+2$

n	-n+2	x[n]
0	2	3
1	1	6
2	0	9
3	~~-1~~	
4	~~-2~~	
5	~~-3~~	



d) $0.5r[6n+12] \rightarrow 6[n+12] = n \therefore (n-12)/6$

n	$(n-12)/6$
0	-2
1	$-11/6$
2	$-10/6$
3	$-9/6$
4	$-8/6$
5	$-7/6$

.5