	Bueco
0	859 hrs Computer LAB 2 FRONT SENCH. MCS 05/12/2024
	L mirs.
	A LIMIT DESCRIBES WHAT A FUNCTION'S VALUE
	APPROACHES AS THE INPUT (") gets close to
	a certain point
7	Left hand limit:
	The value of f(n) as in approaches a
	certain point from the left (smaller values of -)
	Notation: lim f(u) : from values less than (
	· How le find L. H.L
1	-> Look at the past of the func where u2C
	-> plug in values "slightly smaller than" e into
	the fine to see the Behaviour
	0.11 1 1 1
7	Right hand limit
	The value of f(n) as a approaches a
	certain point from the right (greater values of u)  Notation: limit (u) "u>ct means a approaches  Now to find R.H.L: (from values greater than C
	· How to had R. H.I: ( from values greater than (
	-> look at the part of the fine where " ">c
	-> Plug in the values slighty larger than C
	-> Plug in the values slighty larger than c into the fine to see the behaviour.
	IL R.HL = L.H.L, the limit exists at that point
	lim f(n) = LHL = RHL
	Otherwise the limit does not exist.

	Quick Tips for RHL and L.H.L
>	L.H.l look at u <c< th=""></c<>
->	R.H.L look at W/ W/C
2	L.H.L = R.H.L limit exist
->-	L.H.L - R.H.L limit does not exist
	Domain
	Example:
	Got it?
	P(n)= \ n^2+3 if n<1
	[u41 of u21 6]
A Victorian Char	—Ind sign means its C-HL
•	Left hand limit my
****	We'll use f(n)=2+3
Berting & Const.	$\lim_{n \to \infty} \int_{-\infty}^{\infty} \int_{-\infty}^{\infty}$
CONTROL OF STATEMENT	u 71-
The Land State of Sta	Right hand limit nok u > 1+
THE COLUMN TWO IS NOT	
THE PARTY PROPERTY AND ADDRESS OF	
odestrojenestene	This means its
estante apostante	we'll see u+1+ R.H.L
	lim ((-) = u +1
	N->1+
e projem casa media de	111
pistace estimates	Bog Limit does not exists at u=1 because
	L.H.L a & R.H.L.

5-115 N3 it	1 4.2 u \le -2 -2 < u  2 u  2
$14  f(u) = \begin{cases} 3 & 14 \\ -1/2 u^2 & 14 \end{cases}$	u ≤ -2 < -2 < u 2
2-1/2 n <sup>2</sup> if	-2 < u 2
2-1/2 n <sup>2</sup> if	-2 < u 2
L 3	1770 I 17
	W // B
Fire	
	N72
lim f(n)	RHL
N-92-6-7	
As I told ja before that this sign so, look for value n < C.	n means (.H.L.
So, look for value NCC.	Bo. What I see,
$u \le -2$ at 3.	
A Oir Can	
A lim f(w) = 3	e analitento some per mentro tros tresta es omicultan se cues cinas cua estas cua estas como esequenes
This is a constant, and li	imit of this constant
Yemains Same	
the state of the s	National Programme and Associated Association in the Association and Associati
elfor ((A) lim ((L))	- Schering House, and I. M. accounts a Lab Company of the Service Community, and Approximation in contract of the Service Community and Commun
The second secon	
Here , we need to find the Right to	
to look for N)C. C. M	
$\lim_{n \to \infty} f(n) = 3$ (Again, jh	s at u,2)
$\lim_{n \to 2^+} f(n) = 3 \qquad (Again, in)$	s at w/l
R.H. Limit Ps at 3!	
Constinut 18 at 3	continuent princer affiguent eine å mandraben hande med er mer er ett ett sette er ett en trette er ett en trette er ett er er ett er ett er ett er ett er ett er ett er er ett er er ett er er ett er
The state of the s	CAMPAGES THE ROCK AND WAS A SIGNATURE OF A PARK AND A SERVICE OF A DESCRIPTION OF THE ACCUSATION OF TH

R.H.I find need Applying limik 3 (m)-And From there 13mm Again Into Buerd

Question
let f(n)= (n+3)   142
(n+2)
Find
i) lim (43)   142)
(n+2)
(ii) lim (43) 142)
u-> -2 (u+2)
Sulutions
Before proceeding, lets understand what the modely Does.  The moduly 1 u+31 behaves differently depending on the value of u:  (1) When n+2 > 0, 1u+21 if will be n+2 (R.H.L)  (2) When u+2 < 0, 1u+21 if will be - (u+1) L.H.L.
This gives is two cases  f(w) =
Solve by R.H.L lim
* For u => -2+, means u)c, u>-2.
This means $(n+2) = n+2$
f(n) = (n+3) Cx(2)
= -2+3
= 1 $R.H.L$

-> Solve for L.H.L:
n-) -2-, u2-2 Many (u+2) = - (n+2)
Substitute into the func
SUSSITIVE MIS THE TOTE
lim f(n) - (n+3)-(u+2)
lim f(n) - (n+3) - (u+t)
= -(n+3)
= -(-2+3) Applying Limits
= -1 L.H.L
Conclusion:
$\lim_{n \to \infty} f(n) = 1$
n-7-2 <sup>+</sup>
lim Hw=1
n-)-2-
The left hand limit and walk bound limit
The left hand limit and right hand limit is not equal, the two sided limit does not exists
10 110. Chair & the 100 2100 (thirt Goes not cars)

	Kez-poinks
	i) Left hand limit (u -> c-):
	This happen when u is smaller than constant
	ncc
L	i) Right hand limit (n -> ct)1
	This happens when a its is greater than
	constant u)c
	Regardless of Sign
	< 7 guess, you've learn't something with this ONE! >
_	
_	MILL III but Daniel Company
	What the heck is PIECE-WISE FUNCTION?
	Fostmately its not heck, but in easy words
	its defined as,
	A Piecewise function is a function
	that is made up of different formulas
	or rules for different parts of its
	domain (the input values).
	(JOITAIL) CIVE TIPOT OSI VAS).
	Example
	f(n)= [ u2 , i+ n < 1
	1 u42 it u) 1
	This means.
	· if u<1, use the rule f(n) -u2
	if u7/1 use the rile f(n) = u+2