Computing Limits. 1. Is the function defined and continuous. If so, just eg lim 1								
ls the function defined and continuous so, just eg lim xisnx+ex eq lim xisnx+ex eq lim xisnx+ex sinx+ex sinx			Co	muitirg	, Gim	ùts.		
evaluate $ = \frac{\sum \sin 2 + e^{2}}{\sum 3 + 2} = \frac{\sum \sin 2 + e^{2}}{\sum 1} $ During the exam $ \lim_{\sum i = 1}^{n} \sin i = 2 $ In this into a continuous one. $ \lim_{\sum i = 1}^{n} \sin i = 2 $ The first clion into a continuous one. $ \lim_{\sum i = 1}^{n} \frac{x^{2} - 4}{x^{2} - 3x + 2} = \lim_{\sum i = 1}^{n} \frac{x^{2} - 4}{x^{2} - 3x + 2} = \lim_{\sum i = 1}^{n} \frac{x^{2} - 3x + 2}{x^{2} - 3x + 2} = \lim_{\sum i = 1}^{n} \frac{x^{2}$								
evaluate $ = \frac{\sum \sin 2 + e^{2}}{\sum 3 + 2} = \frac{\sum \sin 2 + e^{2}}{\sum 1} $ During the exam $ \lim_{\sum i = 1}^{n} \sin i = 2 $ In this into a continuous one. $ \lim_{\sum i = 1}^{n} \sin i = 2 $ The first clion into a continuous one. $ \lim_{\sum i = 1}^{n} \frac{x^{2} - 4}{x^{2} - 3x + 2} = \lim_{\sum i = 1}^{n} \frac{x^{2} - 4}{x^{2} - 3x + 2} = \lim_{\sum i = 1}^{n} \frac{x^{2} - 3x + 2}{x^{2} - 3x + 2} = \lim_{\sum i = 1}^{n} \frac{x^{2}$		1 %	the fi	nation	defined	and	continu	AT IC
evaluate $ = \frac{\sum \sin 2 + e^{2}}{\sum 3\pi 7} = \frac{1}{\sqrt{11}} $ During the exam $ \lim_{x \to \infty} \sin x = 0 $ In fine = $\lim_{x \to \infty} \sin x = 1 $ Lim $\lim_{x \to \infty} \sin x = 1 $ $\lim_{x \to \infty} \cos x = 1 $		1. 18	/ Jan 73	inx+ex	seq mesc	una	Corwina	N (La)
evaluate $ = \frac{\sum \sin 2 + e^{2}}{\sum 3\pi 7} = \frac{1}{\sqrt{11}} $ During the exam $ \lim_{x \to \infty} \sin x = 0 $ In fine = $\lim_{x \to \infty} \sin x = 1 $ Lim $\lim_{x \to \infty} \sin x = 1 $ $\lim_{x \to \infty} \cos x = 1 $	et so, jus	i eg	11/11/	X2+7				
During the ease 2. Algebraic Manipulations: Transform the function fine condition into a continuous one with chieffer the function into a continuous one explained limits $ \frac{x^2-4}{x^2-3x+2} = \lim_{x\to 2} \frac{x^2-4}{x^2$	evaluate.	_		1				
During the exam token: Lim fin = $\frac{1}{2}$ 2. Algebraic Manipulations: Transform the funtoments of the function of the funtoments of the funtoments of the function of the function of the funtoments of the function of			$\frac{2\sqrt{3}}{\sqrt{2^2}}$	+7		J11		
cohen fine = a digebraic Manipulations: Transform the funce mether whether this a continuous one. In fine = ling fine this cition into a continuous one. In $\frac{x^2-4}{x^2-3x+2}$ Conclude limits PNE. = $\lim_{x\to 0} \frac{x^2-4}{x^2-3x+2} = \lim_{x\to 1} \frac{x+2}{x-1} = 4$. Eq. $\lim_{x\to 0} \frac{(x+2)(x-1)}{(x+2)(x-1)} = \lim_{x\to 1} \frac{1-(1+x)}{x-1-1}$ Eq. $\lim_{x\to 0} \frac{1- 1+x }{x- 1+ 1+x } = \lim_{x\to 0} \frac{1- 1+x }{x- 1+ 1+ 1+ 1+ 1+ 1+ 1+ 1+ 1+ 1+ 1+ 1+ 1+ $				<i> </i>				
lim fin = lim fin ction into a continuous one or wot; coe should e.g. $\lim_{X\to 2} \frac{x^2-4}{x^2-3x+2} = \lim_{X\to 2} \frac{x+2}{x-1} = 4$. e.g. $\lim_{X\to 2} \frac{(x-2)(x-1)}{(x-2)(x-1)} = \lim_{X\to 2} \frac{x+2}{x-1} = 4$. e.g. $\lim_{X\to 2} \frac{(x-2)(x-1)}{(x-2)(x-1)} = \lim_{X\to 2} \frac{x+2}{x-1} = 4$. e.g. $\lim_{X\to 2} \frac{(x-2)(x-1)}{(x-2)(x-1)} = \lim_{X\to 2} \frac{x+2}{x-1} = 4$. e.g. $\lim_{X\to 2} \frac{(x-2)(x-1)}{(x-2)(x-1)} = \lim_{X\to 2} \frac{(x-2)(x-1)}{(x-2)(x-1$	1 11		1.	// .	14	7	1	ا ب
lim fin = lim fin chion into a continuous one. or not; coe should e.g. $\lim_{X \to 2} \frac{x^2 - 4}{x^2 - 3x + 2} = \lim_{X \to 2} \frac{x + 2}{x - 1} = 4$. e.g. $\lim_{X \to 2} \frac{(x + 2)(x - 2)}{(x - 2)(x - 2)} = \lim_{X \to 2} \frac{x + 2}{x - 1} = 4$. e.g. $\lim_{X \to 2} \frac{(x - 2)(x - 2)}{(x - 2)(x - 2)} = \lim_{X \to 2} \frac{x + 2}{x - 2} = 4$. e.g. $\lim_{X \to 2} \frac{(x - 2)(x - 2)}{(x - 2)(x - 2)} = \lim_{X \to 2} (x - 2)(x - $	no worther colothe	2. Al	gevraic	Many	pulallox	s: Jru	ansform	the fun
conclude limits $ \begin{array}{cccccccccccccccccccccccccccccccccc$	lim fln) = lim-	tion	into o	conti	inuous	one.	•	
$\lim_{x \to \infty} \frac{ x + 2x x + 2y }{ x - y } = \lim_{x \to \infty} \frac{ x - y }{ x - y } = \frac{ x - y }{ x $	or not; we show	ld e.q	10/1 V					
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		0	lim Lx	+27(x-2).	= lim	×+2·	= 4.	
$\lim_{x \to 0^{-}} \frac{\lim_{x \to 0^{-}$			/	-2)(4-1) - J Hx ·	<i>X</i> —72	77	•	
$\lim_{x \to 0^{-}} \frac{\sin x}{x} = 1$		l eg	× × × 0	X / H	-) /	1 -	-U+x).	
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$\lim_{x \to 0} \frac{\sin x}{1 + \sqrt{1 + x}} = -\frac{1}{2}$ $\lim_{x \to 0} \frac{\sin x}{1 + \sqrt{1 + x}} = -\frac{1}{2}$ $\lim_{x \to 0} \frac{\sin x}{x} = 1$ $\lim_{x \to 0} \frac{\sin x}{2x} = 2$ $\lim_{x \to 0} \frac{\sin x}{2x} = \frac{2}{3}$ $\lim_{x \to 0} \frac{\sin x}{3x} = \frac{2}{3}$					= 11	m ·	5	
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$e.g. \lim_{x \to 0} \frac{1}{2x} = \lim_$		ready	SALVA		•			
$e.g. \lim_{X \to 0} \frac{\lim_{X \to 0} \frac{2x}{\sin 2x}}{\sin 2x} = \frac{2}{3}$ $= \lim_{X \to 0} \frac{2x}{3x} \frac{\sin 3x}{3x} = \frac{3}{3}$	Lim Sinax =		lim s	sin (2x)		Lim	sin(ax)	= 1
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$= \lim_{X \to 0} \frac{2x}{3x} = \frac{2}{3x}$ $= \lim_{X \to 0} \frac{2x}{3x} = \frac{2}{3}$			X-70 CA	1 2×	ニノ		for an	y a to
$= \lim_{X \to 0} \frac{2x}{3x} = \frac{2}{3x}$ $= \lim_{X \to 0} \frac{2x}{3x} = \frac{2}{3}$		e.g.	Jim Si	133.				
			lim 2x.	2%	2.			
			34.	3x	3			
$\left \begin{array}{c c} e \cdot q \cdot \xrightarrow{x \rightarrow 0} & x^2 \end{array}\right $		_	lim 1					
		e.g	X→0	73 ² ·				

	= lim	(1-cosx)(1+cosx) x2. (1+cosx)	$= \lim_{x \to 0} \frac{1 - \cos^2 x}{x^2 \cdot (1 + \cos^2 x)}$ $= \lim_{x \to 0} \frac{\sin^2 x}{x^2 \cdot (1 + \cos^2 x)}$	$\frac{1}{J} = \frac{1}{J+J} = \frac{1}{2}$
4.	Limit e.g. Lim	at infinity $ \sum_{x=2}^{3} [2x^{3} - 3x^{2} + 7] $ $ x^{3}[2 - 3 \cdot \frac{1}{x} + 7] $	We	only need to
				e about the gest power and e it out.
		$\frac{2x^{2}+x-1}{3x^{2}+10x+e}$ $\frac{x^{2}\left[2+\frac{1}{x}-\frac{1}{x^{2}}\right]}{x^{2}\left[3+\frac{10}{x}+\frac{e}{x^{2}}\right]}$	LOPS CORP.	3 70 0000
	e.g. lim = lim - lim	$ \frac{\sqrt{x^{4}+1}}{\sqrt{x^{4}+1}} + x^{2} $ $ \frac{\sqrt{x^{4}+1}}{\sqrt{x^{4}(1+1/x^{4})}} + x^{2} $ $ \frac{\sqrt{x^{4}(1+1/x^{4})}}{\sqrt{x^{4}(2+1/x^{4})}} + 2x $ $ \frac{x^{2}(\sqrt{1+1/x^{4}})}{\sqrt{x^{4}+1}} + \frac{2}{x} $		
	$= \lim_{x \to \infty} \frac{1}{2} = $	$\frac{x^{2}(\sqrt{x^{4}} + \frac{2}{x})}{\sqrt{1+y^{2}+1}}$ $\sqrt{2+y^{2}+1}$		