	JESISKA LORENZA / XII - IPA /16
	LIMIT 9
	Tentukan Lim / 1 1
	Tenturan $\lim_{x\to 0} \left(\frac{1}{\tan x} - \frac{1}{\sin x}\right)$
	$y = \sin x \rightarrow y' = \cos x$
	$y = \cos x \rightarrow y' = -\sin x$
	$y = \tan x \rightarrow y' = \sec^2 x$
	g - turn - g - jec n
	$= \lim_{X\to 0} \left( \frac{0}{\sec^2 x} - \frac{0}{\cos x} \right)$
	X-30
	= 0-0
	= 0
2.	Tentukan lim (1-cos2x) sec 2x
	X-> #
	$= \lim_{X \to \frac{\pi}{4}} \left( 1 - \cos 2 \left( \frac{\pi}{4} \right) \right)^{\sec 2X}$
	1 4
	= 1 sec 2x
	= 1 . \ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\
3.	Tentukan lim sin 7x + tan 3x - sin 5x
	x->0 tangx - tan 3x - sinx
	bentuk 0
	bagi pembilang dan penyebut dengan x
	$\frac{\sin 7x}{x} + \frac{\tan 3x}{x} - \frac{\sin 5x}{x}$
	$\frac{1}{x \to 0} \frac{\tan 9x}{\tan 9x} - \frac{\sin x}{x}$
	X
	$= \lim_{x\to 0} \frac{7+3-5}{9-3-1}$
	<u> </u>
	5
7	

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[4]	Tenturan um 1- cos² x
	$\times -90 \times^2 \cdot Col(\times + \frac{\pi}{3})$
	$1 - \cos^2 a x = \sin^2 a x$
	SIN <sup>2</sup> X
	$\lim_{X \to 0} \frac{1 - \cos^2 X}{X^2 \cdot \cot \left(X + \frac{\pi}{3}\right)} = \lim_{X \to 0} \frac{1 - \cos^2 X}{X^2 \cdot \cot \left(X + \frac{\pi}{3}\right)}$
	$= \lim_{X\to 0} \frac{\sin x \cdot \sin x}{\times} \cdot \frac{1}{\cot(x+\overline{x})}$
	$= 1.1 - \frac{1}{\cot(0 + \frac{\pi}{2})}$
	1
Samuel State Configuration	= 1
	V3
College of the Colleg	= \(\sigma\)
5	Tentukan lim (x- 本) sec 2x
Marie Province Control of the Contro	
Management of the Control of the Con	$\cos x = \sin \left(\frac{\pi}{2} - x\right)$
Management of the state of the	
Property of the Park of the Pa	LIM (x-A) Sec 2x = LIM (x-A)
Machine Community (Community Community Communi	Lim (x - 奇) Sec 2x = lim (x-奇) x-> 奇 (052x
	$= \operatorname{Um} \left( \times - \frac{\pi}{4} \right)$
Manage in the contract of the	$\times \rightarrow \stackrel{?}{q}  \sin\left(\frac{\pi}{2} - 2x\right)$
Marie Ma	2
	$= \lim_{x \to a} (x - \frac{\pi}{4})$
	x-> 年 sin-2(x-年)
	= -1
(6.)	Tentukan Um 1-cos² (x-3)
	$\chi^2 - 6\chi + g$
	$1 - \cos^2 \alpha x = \sin^2 \alpha x$
(Francisco Barrier)	lim 1-cos x : (1m sin 2 (x-3)
(The Miller Assessment of the Contraction of the Co	$X \to 3$ $X^{L} - 6X + 9$ $X \to 3$ $(X - 3)^{2}$
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	$= u_{M} \sin(x-3) \cdot \sin(x-3)$
	×->3
	= 1.1
7.	Tentukan um Sin 8x + sin 2x
	X-10 4 X COS 3 X
	( N 0 0 3 3 X
	sin x + sin y = 2 sin \( \frac{1}{2} (x+y) \). cos \( \frac{1}{2} (x-y) \)
	lim sin 8 x + sin 2 x = lim 2 sin \frac{1}{2} (8 x + 2 x) \cos \frac{1}{2} (8 x - 2 x)
	x->0 4x. cos 3x x->0 4x cos 3x
	= UM 25IN 5X. COS3X
	×->0 4× cos 3×
	= Um 2. SINSX COS 3X
	x->0 4x cos 3x
	$= 2. \frac{9}{4}.1$
	$=\frac{5}{2}$
	2
8.	Tentukan um VZ - V1+cosx
	31n = X
	$\cos ax = 2\cos^2 \frac{1}{2}ax - 1$
	Lim V2 - V1 + cosx = um V2 - V(2 cos² ½ x-1)
	X-30 SIN2 X X-30 SIN2 X
	= UM V2 - V2. V(cos2 1/2 x)
0	x->0 sin = x
0	= UM V2 (1-cos 1 x)
	x->0
	$1 - \cos qx = 2\sin^2 \frac{1}{2}qx$

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= um V2 (2 sin 2 ½ (½) x)	
×->0 SIN 2 X	
X-)0 JIN2X	
= V2 . 2 . 1 . 1	
12.2.4.9	man to the second of the second
= 1 16	
= 1/8 1/2	
# Tidak ada Latihan soal yang diberikan	di viaeo
47 (10.01 V)	
KEKONTINUAN FUNGSI	
9	f(a) = C
f(a) = d	N Wall Control
1 df	
C	7
b b	0
) X	\
9	×
$(2) y \qquad f(a) = b \qquad (4) \qquad y$	
VC 70	
b • //	
	9 87 . J. S. S.
	-> \ <del></del>
	a
	\$ 1
Syarat fungsi kontinu, f(x) kontinu	di x - 01
	al x cu
(1) f (a) terdefinisi	
2) um f(x) ada	
x->a	
x-)a	
	× 1
	DIS TES CONTRESS
	Corner Carried very

	contoh 1
70	$f(x) = \begin{cases} x+1, & x < 2 \\ 1, & x = 2 \end{cases}$ apakah Kontinu di $x = 2$ ?
	$\times^2-1$ , $\times \gg 2$
	$C = 2 \rightarrow f(2) = 2^2 - 1 = 3$
	$\lim_{x \to 0} f(x) = \lim_{x \to 0} (2+1) = 3$
	$x-)2^{-}$ $x-)2$ $y = 3$
	$\lim_{x \to 2} f(x) = \lim_{x \to 2} (2+1) = 3$
	X->2
	$\lim_{x\to 2} f(x) = f(2)  \forall  (\text{ton}_{t n} u \text{ di } x = 2)$
	Contoh 2
	$f(x) = \int \frac{x^2 - 1}{x - 1} \qquad x \neq 1$
	f(1) = 1
	$\lim_{x \to -1} x^{2} = \lim_{x \to -1} (x+1)(x+1) = 2$
	$x \rightarrow 1$ $x \rightarrow 1$ $(x \rightarrow 1)$
	lim f(1) + f(1)
	X-)1
	2 ≠ 1
	diskontinu
	arsporting
	Contoh 3
3	$((x))  C(2x+3)(x-2)  x \neq 2$
	$f(x) = \int \frac{(2x+3)(x-2)}{(x-2)},  x \neq 2$
	L 5 , X = 2
7	f(2) = 5
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lim (2x+3)(x=2) = Lim (2x+3)
X-)2 (X-X) X-)2
= 2.2 + 3
 = 7
$\lim f(x) \neq f(2)$
$\lim_{X\to 2} f(X) + f(D)$
( DICKONTINU)
7 # 5
contoh 4 /
f(x) = cos (x) apakan kontinu?
· X = C , f(c) terdefinisi -> f(c) = cos (c)
· h = x - c -> x = h + c , x -> c
h->0 -> um f(x) adq
lim cos (h+c) ada
h->0
um [cosh. cosc - sinh sinc]
h->0 1 cos C 0
lim (cos c - 0) = cos c
h-10
(; ) 1 : For y - who 1
$\lim (\cos c - 0) = f(c) = \lim f(x)$
h->0 X->C
COSC = COSC
Kontinu
contuh 5 9
0 V IVI
X
$\begin{array}{cccccccccccccccccccccccccccccccccccc$

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	f(0) = 2
	$untu \in x < 0 \rightarrow f(x) = \frac{x - (-x)}{x} = \frac{2x = 2}{x}$
	L, $um - f(x) = 2$
	$f(x) = \frac{x -  x }{x}$
	• $lm f(x) = f(0) = 2$
	×→0
$\exists$	
$\exists$	
	Contoh 6
	$f(x) = \begin{cases} 4x + 3, & \text{untur } x \leq 2 \\ x^2 + 1, & \text{untur } 2 < x \leq 4 \end{cases}$
	5-bx, untur $x>9$
	f(x) kontinu, cari a +b!
	7 7 ×
	2
	$x = 2$ $\int \lim_{x \to 2} f(x) = \lim_{x \to 2} f(x)$
	X->2- X->2+ =5
	$\lim_{x \to 0}  ax + 3  = \lim_{x \to 0}  x^2 + 1  = 1$
	$\lim_{x \to 2^{-}} ax + 3 = \lim_{x \to 2^{+}} x^{2} + 1 \qquad a = 1$
=	$x = 4$ $\lim_{x \to 4^{-}} f(x) = \lim_{x \to 4^{+}} f(x)$ $\int_{1}^{2} q^{2} + 1 = 5 - b(4)$
	y 17 = 5-4b
	b = -3
	Jadi a+b

1 + (-3)

di

halaman

= -2 //

Catalan Nyimak

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	Date:
Lunion av	
Catalan Nyimak Putaran 1 : Senin, 30 Agustus	08:15 - 08:28
Put aran 1: Senin, 30 Agustus	05:46-05:59
Putaran 2: Senin, 6 September	
Putaran 3: Senin, 6 september	
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