



$\left \frac{u^2-1}{n}\right = e^{C_1}$	
u^2-1 $\pm e^{C_1}$	
The state of the s	
$U^2-1 = \lambda C$	
$u^{2}-1 = xc$ $y^{2}-xc+1$	
22	
$y^2 = x^3c + x^2$	
$y = \sqrt{x^3c + x^2}$	
$y^{2} = x^{3}c + x^{2}$ $y = \sqrt{x^{3}c + x^{4}}$ $= x \sqrt{x^{2}c + 1}$	
8 dy + y = e x y - 2	
8 dy + y = e ^x y - z	
y dy y = ex	
u = y3	
du 3y2 dy	
du du	
1 du y dy 3 dr dr	
3 dr dr	
1 du , u = en	
3 dre	
du 3u = 3er	
$IF = e^{\int 3 dx} e^{3x}$	
u= 1 (3er.e3r dr	
e ³ⁿ J	
= 3 e n [e 4 n dr	
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$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	= 3 e ^{-st} e ^{4t} + ce ^{-st}	
$y^{\frac{1}{2}} \cdot 3 e^{x} \cdot 4 e^{x^{2} \cdot 3 \cdot x}$ $y^{\frac{1}{2}} \cdot \frac{3}{4} e^{x} \cdot 4 e^{x^{2} \cdot 3 \cdot x}$ $1 \text{an } = (-1)^{n+1}$ $a) \text{an } \text{an } $		
$y^{\frac{1}{2}} \cdot 3 e^{x} \cdot 4 e^{x^{2} \cdot 3 \cdot x}$ $y^{\frac{1}{2}} \cdot \frac{3}{4} e^{x} \cdot 4 e^{x^{2} \cdot 3 \cdot x}$ $1 \text{an } = (-1)^{n+1}$ $a) \text{an } \text{an } $	= 3 ex + ce-sh	
$y = \sqrt[3]{3e^{x} + c}$ $Tutorial 7$ $1 an = (-1)^{n+1}$ $a) bim an $ $n o$ $1 im 1$ $n o$ $a o$ $a o$ $b) an = 3n s^{n} n$ $2n$ $sin \pi/2n$ $\sqrt{3}n$ $3 sin \pi/2n$ $\sqrt{3}n$		
$y = \sqrt[3]{3e^{x} + c}$ $Tutorial 7$ $1 an = (-1)^{n+1}$ $a) bim an $ $n o$ $1 im 1$ $n o$ $a o$ $a o$ $b) an = 3n s^{n} n$ $2n$ $sin \pi/2n$ $\sqrt{3}n$ $3 sin \pi/2n$ $\sqrt{3}n$	y = 3 e + c e - 3 t	$C = C_1 e^{-St}$
Tutorial 7 1 an = $(-1)^{n+1}$ a) lim an $n \rightarrow \infty$ $1 $		
Tutorial 7 1 an = $(-1)^{n+1}$ a) lim an $n \rightarrow \infty$ $1 $	$y = \frac{3}{3} e^{\pi} + C$	
1		
1		
a) $\lim_{n\to\infty} a_n $ $\lim_{n\to\infty} a_n = 0$ = $\lim_{n\to\infty} \frac{1}{n}$ $\lim_{n\to\infty} $	Tutorial 7	
a) $\lim_{n\to\infty} a_n $ $\lim_{n\to\infty} a_n = 0$ = $\lim_{n\to\infty} \frac{1}{n}$ $\lim_{n\to\infty} $	C., N.1	
lim an $\frac{1}{n - \infty}$ \frac		
$n \rightarrow \infty$ $= \lim_{n \rightarrow \infty} 1$ $= \lim_$		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		4 00 1 - 1
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= 0 0 0 0 0 0 0 0 0 0		
b) $O_n = 3n \sin \frac{\pi}{2n}$ $\frac{2n}{2n}$ $\frac{\sin \pi}{2n}$ $\frac{3}{3n} = 3 \sin \frac{\pi}{2n}$ $\frac{n}{4n}$ $\frac{3}{4n} = 3 \sin \frac{\pi}{2n}$	= n	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	b) 0 - 3 - 9 - H	
1/3n - 3 sin 11/2n - 3 sin 11/2n - 3 sin 11/2n		
1/3n - 3 sin 11/2n - 3 sin 11/2n - 3 sin 11/2n	sin 11/2n	
= 3 sin 172n 1/n = 3 sin 172n		
- 3 sin 172n		
= 3 sin T/2n		
- 1/2n	2 1/2n	
$\frac{3\pi}{2}\pi\frac{\sin^{11/2}n}{\pi/2n}$		

$\begin{array}{c} n \rightarrow \infty \\ = \lim_{n \rightarrow \infty} 3_{n} \sin \frac{n}{2} \\ = \lim_{n \rightarrow \infty} 3_{n} \sin \frac{n}{2} \\ = \frac{3}{11} \\ = \frac{3}{2} \\ = \frac{3}{11} \\ = \frac{3}{2} \\ = \frac{3}{11} \\ = \frac{3}$	lim an	
c) $a_{n} \sim \ln \left(\frac{n+1}{n} \right)$ $\lim_{n \to \infty} \ln \left(\frac{n+1}{n} \right)$		
c) $a_{n} \sim \ln \left(\frac{n+1}{n} \right)$ $\lim_{n \to \infty} \ln \left(\frac{n+1}{n} \right)$	- Lim 3 11 sin 172n	
c) $a_{n} = ln\left(\frac{n-1}{n}\right)$ lim a_{n} tim $ln\left(\frac{n+1}{n}\right)$ lin $ln\left(\frac{n+1}{n}\right)$ lin $ln\left(\frac{n+1}{n}\right)$ lin $ln\left(\frac{n+1}{n}\right)$ lin $ln\left(\frac{n+1}{n}\right)$ - $ln\left(\frac{n}{n+2}\right)$ - $ln\left(\frac{n}{n+2}\right)$ - $ln\left(\frac{n}{n+2}\right)$ 2. $a_{n} = n\sin\left(\frac{n+2}{n}\right)$	n→20 2 172n	
c) $a_{n} = ln\left(\frac{n-1}{n}\right)$ lim a_{n} tim $ln\left(\frac{n+1}{n}\right)$ lin $ln\left(\frac{n+1}{n}\right)$ lin $ln\left(\frac{n+1}{n}\right)$ lin $ln\left(\frac{n+1}{n}\right)$ lin $ln\left(\frac{n+1}{n}\right)$ - $ln\left(\frac{n}{n+2}\right)$ - $ln\left(\frac{n}{n+2}\right)$ - $ln\left(\frac{n}{n+2}\right)$ 2. $a_{n} = n\sin\left(\frac{n+2}{n}\right)$	3 11	
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$\lim_{n\to\infty} \operatorname{lim} \left(\frac{n+1}{n} \right) = \lim_{n\to\infty} \operatorname{lim} \left(\frac{n+1}{n} \right) $		
$\lim_{n\to\infty} \operatorname{lim} \left(\frac{n+1}{n} \right) = \lim_{n\to\infty} \operatorname{lim} \left(\frac{n+1}{n} \right) $	(c) $a_n = ln\left(\frac{n+1}{n}\right)$	
In $\ln \ln \left(\frac{n+1}{n} \right)$ In $\ln \ln \left(\frac{p(n)}{n} \right)$ In $\ln \ln \left(\frac{p(n)}{n} \right)$ In $\ln \ln \left(\frac{p(n)}{n} \right)$ In $\ln \ln \ln \ln \left(\frac{p(n)}{n} \right)$ In $\ln \ln \ln \ln \left(\frac{p(n)}{n} \right)$ In $\ln \ln \ln \ln \ln \left(\frac{p(n)}{n} \right)$ In $\ln \ln \ln$		
$\lim_{n\to\infty} \ln\left(\frac{n+1}{n}\right)$ $\lim_{n\to\infty} \ln\left(\frac{n}{n}\right)$		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$n \rightarrow \infty$ $N + 1$	un ln (f(x)) : ln (lim f(x))
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\binom{n}{n}$	
$-\ln\left(\lim_{n\to\infty}\left(\frac{1}{n}\right)\right)$ $-\ln\left(\frac{1}{n}\right)$ $-\ln\left(\frac{1}{n}\right)$ $-\ln\left(\frac{1}{n}\right)$ $-\ln\left(\frac{1}{n}\right)$ $-\ln\left(\frac{1}{n}\right)$ $-\ln\left(\frac{1}{n}\right)$		
$-\ln(1)$ $-\ln(1)$ -0 $2 \cdot \ln(1)$ $2 \cdot \ln(1)$ $-1 \cdot \ln(1)$	n-sa n	
$-\ln(1)$ $-\ln(1)$ -0 $2 \cdot \ln(1)$ $2 \cdot \ln(1)$ $-1 \cdot \ln(1)$	lu (lim ()	
$2. Q_{n} = n \sin \left(\pi + 3 \right)$		
$2. Q_{n} = n \sin \left(\pi + 3 \right)$	- ln (1)	
$2. Q_n = n \sin \left(\frac{\pi}{n} + \frac{3}{n} \right)$		
	2. an = n sin (1 + 3)	
sin (II + 3)	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
	$\frac{1}{2} \sin \left(\pi + 3 \right)$	
lim an		
1-300		
$\lim_{n \to \infty} \sin \left(\pi + 3/n \right)$		
n-300 1/n	1/n	

l'in SIN (117 5/05) => Indeterminate	
n->0	
$\lim_{N\to\infty} \cos\left(\frac{\pi}{N}\right) \left(\frac{3}{N^2}\right)$	
n-io (n) (n/2)	
1 Yye	
= lim cos (17+0) (3)	
n-> a	
- (-1)3	
z -3	
b) Num d = az-a, z 7-4-3	
an= 4+ (n-1) 3	
= 3n + 1	
Den d= a2- a,	
ay = 1+ (n-1) 2	
2n-1	
an = 3n-1	
2n-1	
lim an	
00 c-v1	
. lim 3n-11	
n->00 2n-1	
= lim 34	
n > 00 2n	
= 2	
= 3 2	