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DEPARTMENT: MEDICINE AND SURGERY

COLLEGE: MEDICINE AND HEALTH SCIENCES

MATRIC NO: 19/MHS01/147

COURSE CODE: MAT 104

	anct in a comment	ps.
10	S2n2 hnz dz	3
W1.7%	Let u = ln 2 , dv = 222 = 1	
	$\frac{du}{du} = L \qquad V = 2x^3$	
	2	
2	$olu = 2e^{-i} dz$	
	Sudv = uv - Sudupbel - vo = ubst	
	$\int u dy = \ln z - \frac{1}{2} \frac{1}{3} - \frac{1}{3} \frac{1}{3} - \frac{1}{3} \frac{1}{3} \frac{1}{3} - \frac{1}{3} \frac{1}{$	
	3	
	$= \ln 2 - 2x^{3} - 1 \int 2x^{2} dx$	
	3 3 -	
	$= \frac{2n^3}{3} \ln n - \frac{1}{3} \left(\frac{2n^3}{3} \right)$	
	$= \frac{2n^3 \ln n - 1 \cdot 2n^3}{3}$	
	$= 2x^{3}$ ($\ln x - 1$) + C	
	502 - 30 0 13 - 30 12 - 30)	
7	$(3te^{2t}dt)$	
1	3th at	
	Let u=3t , dv= e2t	
	$\frac{du=3}{\sqrt{2}} = \frac{1}{\sqrt{2}} e^{2t}$	
	dt	
	du = 3t	
	Sudy = uy - (vdu 2 + x 20) =	
	= 3t.1 e2t - (1 e2t.3 dt	
	2	14
	$= \frac{3}{2}te^{2t} - 1 \left(3e^{2t}dt\right)$	-
	2 (8-4) 00 2 (John 12) = 820 m 02	
	$= 3 t e^{2t} - 1 \left(3 e^{2t} \right)$	
	2 2 2 2	
	$= 3 + \ell^{2t} - 3 \ell^{2t} + C$	
	2 4	
1	9. /	

Sazsina da	Then which HOL THUS	-
let u= 22;	dy = sinze	. 1
<u>dy</u> = 200,	V = - cos 22	
dre	- L - L - L - L - L - L - L - L - L - L	
$du = 2\pi dx$	che 2c - 2	BARRATIO ALL ST. CO.
	du= 25-0135	
Juch = un	- Juduunul - vo = ybil	
- n cos2 -	-cosu - 2 ach	
= -20052-	J-Incosna	
= -x2 cos n -	(-1200sada	
= - 2 ² cosu -	let a = - 2x and du = cos x	
The second secon	$\frac{dy}{dz} = -2$; $y = \sin z$	
	and the second s	
Y.	du=-2d2	
	Judy = ux = Judu =	
	= - 22. sinz - Sinze-2dz	
	=> -2n-sinz - 5-2sinzdz	
	\Rightarrow - 2nsina - $\left(-2\int \sin x dx\right)$	2
Constitution and the second contract of the s	\Rightarrow -22 sin 2 - (-2 [-652])	4
	> -2nsnz + 2 [-cosz]	
= 2	- → - 22 sinze - 2 cosze	-
2 60521 +	22 sin2 + 2 cos2 + C + 22 sin2 + 2 cos2 + C	

 $\int \cos 5 \times \cos 6 \times dx$ $\cos A \cos B = \int \left[\cos (A+B) + \cos (A-B) \right]$ 6 + A = 52, B = 62 6 + 6 = 1 [6 = 62] $\cos 5_2 \cos 6_2 = 1 \left[\cos 11_2 - \cos 2 \right]$ $\int \cos 5\pi \cos 6\pi \, d\pi = \frac{1}{2} \int (\cos 11\pi - \cos \pi) \, d\pi$ Jus 52 ws 62 du = 1 Sin 1/2 - sin x = sin 1/2e - Sinx + C sin Tu cos 2ndu Sin A cos B = 1 [Sin (A+B) + Sin (A-B)]Let A= 72, B=22 Sin 72 cos22 = [[sin(72+22) + sin (72-22)]

1	
	$5in7a\cos 2\alpha = \frac{1}{2}\left[\sin 9x + \sin 6x\right]$
	2
	(has well as a fine of the state of the sta
	$\int \sin 7a \cos 2a da = \int \left(\sin 9a + \sin 5a \right) da$
	2 3
	$= 1 \left(-\cos 9\pi - \cos 5\pi \right)$
9	2 2 9 5
	$= -\cos 9x - \cos 5x + C$
	18 10
	-m\
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the excitation of the	
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5	
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