## Morth Homework 4.5A

<b>.</b>		
10. Saint Jercost of	WUJAAAAA	24. S ===== de
let v= 14cost	18. Ssin x sin (osx) dx	let u= 14 tant
du = - sint	let u: cosx	de = sect E
de = - du sint	du = - Sin x	de = <del>du</del> de = <del>gat</del> e
= Ssint Ju - du	Bix = du	= 052€ dv
5 - Ju 20	Sink - sin u - du sina	5 cos26
	= S-sinu du	= ( 0-42 70
$=-\frac{2}{3}$ $\int_{0}^{3/2}$ +c	= cos u + c	240+c
= - \frac{2}{3} \left( 1 + cos \dark \right)^{3/2} + C	= cos (cos x) + C	Mostore
		= 2/1+tant + c
12. S sec <sup>2</sup> 20 d0	20. SAN X+2 da	
let u= 20	let U = 1 x + 2 ; x = U - 2	26. $\int \frac{\sec^2 x}{\tan^2 x} dx \Rightarrow \frac{\cos^2 x}{\sin^2 x} \Rightarrow \frac{1}{\sin^2 x}$
<del>30</del> <del>30</del> = 2	<i>σ</i> χ	(6)7%
$d\theta = \frac{dv}{2}$	90 = 9×	Sold and the second sec
$=\int \sec^2 v \frac{dv}{2}$	= 5 x40 00	11/4
= 1/2 tan u + c	= S (U-2) NU OU	Le State of the st
= \frac{1}{2} \tan 20 + c	= \ ( \( \pi^{3/2} - 2\sqrt{u} \) du	C 1 .
2 44 20 4 6	$= \frac{2}{5} \frac{5/2}{3} - \frac{4}{3} \frac{3/2}{5} + c$	$=\int \frac{1}{\sin^2 x}  dx$
and the second s	$\left(-\frac{2}{5}(x+2)^{5/2} - \frac{4}{3}(x+2)^{3/2} + C\right)$	(Mosses)
14. Sy2 (4-y3)2/3 dy	3 ()	$=-\cot^2\alpha+C$
let u= 4-y3	22. $\int \cos\left(\frac{\pi}{\alpha}\right) x^{-2} dx$	_
$\frac{\partial u}{\partial u} = -3y^2$	$let \ o = \frac{\eta}{\alpha}$	$26. \int x^2 \sqrt{2+x} dx$
$dy = -\frac{1}{3}y^{-2}dv$	$\frac{\partial u}{\partial x} = -\frac{\pi}{x^2}$	let u= 2+x ; x= u-1
	$dx = -\frac{x^2}{\pi}dU$	<u>।</u> %
$= \int -\frac{1}{3} u^{2/3} \partial u$	The second secon	δυ = dα
= - 1 5 5 5 4 C	$= \int \cos u \cdot \frac{1}{\chi^2} \cdot - \frac{\chi^2}{\pi} du$	= S x2 Ju du
= - = (4-43) 513 + c	= S - \frac{1}{\pi} \cosu du	= \( (u=2)^2 \tau  \tau \)
	= - SINU + C	= \ ( \underset \underset - 4 \underset + 4) \underset \
16. S Shalk de	$= -\frac{1}{\pi} \sin\left(\frac{\pi}{\alpha}\right) + c$	= ( ( 1 12 - 40 3/2 + 40 1/4 ) du
iet urda	And the second process of the second process	= 2 +12 - 5 usi2 + 8u 312 + c
<u>du</u> : 1/2√x	alliklätikkyrentrannikologiska (-na ia s. menn i på fyrtrekyrisetersketter) (1964-1964-1964-1964-1964-1964-19	$= \frac{2}{7}(2+x)^{\frac{7}{2}} - \frac{8}{5}(2+x)^{\frac{5}{2}} + 8(2+x)^{\frac{2}{2}} + c$
on: 2 ત્રીલ du	annenggyangangan-dalam kenjadah, jaga-agalam danangga padasan a menduapahang pamma am-as-as-as-as-as-as-as-as-	\$ 2000
3 SINNA . 2NX DU	entermination de un respective management de la material de serve en equipa de action politicale de describit de la material d	
: Zsano	rthian, retain antain at ataly coloring busins, quartees during the coloring at the coloring and the coloring	

= - 2005 JX + C

 $30. \int_{x^{3}} \sqrt{x^{2}+1} \, dx$   $10t \quad 0 = x^{2}+1 \quad x^{2} = 0 - 1$   $\frac{\partial u}{\partial x} = 2x$   $= \int_{x^{3}} \sqrt{u} \quad \frac{\partial u}{2x}$   $= \int_{x^{2}} x^{3} \sqrt{u} \quad \frac{\partial u}{2x}$   $= \int_{x^{2}} (u-1) \sqrt{u} \, du$   $= \int_{x^{2}} \frac{1}{2} (u-1) \sqrt{u} \,$