= (Exesci	ue # 3.5) = &(1.	-34) Date
Find ody/dxerse ( wine	(1) y = (secx + t	Rules : 5 = (3.5 c (8)
$0 y = -10x + 3\cos x$	2 y = 3 + Ssinn Sd.	$\frac{d}{dx}\cos x = -\sin x$
ड्रुड,	डर्न.	du sinx = cosn
y= -10 n +3 cosn	$y = \frac{3}{x} + 5 \sin x$	du cscr= -cscrcotu
$y' = -10 \frac{d}{dn} + 3 \frac{d}{dn} \cos n$	y'= 3 d x + 5 d sinx	du secx = Secxlann
(37,882,4,903,775		$\frac{d}{du} \neq aux = Sec^2 u$
$y'=-10-3\sin x$	$y'=-3x^2+5\cos n$	d cot = - csc'n
$3  y = \chi^2 \cos \mu$	€ y = Tx secx +3	The second of th
$y = x^2 \cos x$	y= Nxsecx+3	
y'= d 2 d cosx	$y' = \sqrt{x} d \sec x + s$	$ecx \stackrel{d}{=} \chi^{\frac{1}{2}} + \stackrel{d}{=} (3)$
$y' = x^2 \frac{d \cos x + \cos x}{dx}$	- X ,	and the warmen of
	y = Tx secx tank +	2√2 +0
$y' = -x^2 \sin x + 2x \cos x$	y'= Tx secx Tank	
By= cscx - 4Tr +7	(1) 11 22 to	2/x
$y' = \frac{d}{dx} \operatorname{cscx} - 4 \frac{d}{dx} x'$	$\begin{pmatrix} y + d & (7) \\ du & 3d \end{pmatrix}$	<del>\frac{1}{\chi^2</del> }
$y' = -csc^2 x \cot x - \frac{24}{21x}$	y= 22 d cotx-	t cotx d n2 - dix=2
$y' = -\csc^2 x \cot x - \frac{2}{\sqrt{x}}$	$y'x^2 csc^2x +$	Incotu + 2x-3
Tx	y'= -x'cscx	+2xwtx + 2/x3
f(x) = sinxlanx	$f(x) = \sin x \sec^2 x$	
f(x)= sinx d tank+ to	und sain	sinx (sec'n + 1)
	1.7 (7) =	JIMA (SECK 7 1)

$\mathcal{E}_{s}(\mathbf{t} - \mathbf{z}; \mathbf{t})$	Date
8) g(n) = cscxcotx	1 y = (secx + tour) (secx - touri)
	100 - 100 - 300 St. 1 - 30 1 -
g'(x) = csex of cotx + cotned csex	y'= (secx + taun) d (secn - taux) + (secx + taux)
g'(n) = -csc3x + (-csex cot2n)	du (secx +tanu)
$g'(x) = -csc^{2}x \left(csc^{2}x + cot^{2}x\right)$	y'= (secretarn) (secxtann - sech) +
g'(x) = - csex (cscx + co + 2)	(secx-tann) (secxtann + sec2x)
(Sinx + cosx) seicx.	y'= secz klann - secs x + secxtan x - sex tanx
y'= (sinx+cosn) d secn + secx d (sinx+cosu)	+ secontain + secon - secretain - secontain
the second secon	y'=01
y'= (sinx+cosn) (secx laux) + secx (cosn-	$\frac{1}{1} y = \frac{\cot x}{1 + \cot x}$
y'= (sinx+cosx)sinx + cosx-sinx cosx cosx	The second secon
Sin'n + cosysiny + cos'n - cos x sinn	du du du du du du du
g'= -csch-csch+ cos?n	(1+cotx) <sup>2</sup>
$y' = 1 \rightarrow y' = sec^2 x$	y'= (1+cotx) (=cscze) -cotx(-csczx)
Cos <sup>2</sup> n	
$ y = \frac{\cos n}{1 + \sin n} $	y'= - cse negtn + esc nestn-csen
y'=(1+sinx) d(cosx) -(cosx) (d(1)+ d sa	$(1+\cot x)^2$
(1+sinx)2	$y' = -csc^2n$
$y' = -\sin x - (\sin^2 x - \cos^2 x)$	[ (1+cotx)2 ]
	1=> (1+sinx) wholesing = (N) ?
$y' = \frac{-\sin x - 1}{(1 + \sin x)^2} \Rightarrow$	fy' = -1/q + sinx
(1+smx)	

		Date
9		4 y= cosn + x respective = (x).
0	$y = 4\left(\frac{1}{\cos n}\right) + \frac{1}{\tan n}$	y=x(dncosx)-cosndn+cosndnx-xdcosn
	y= 4 secx + cotn	x² (cos²u)²
•	y'= 4 d secx + d cotx	$y' = -\frac{x \sin x - \cos x}{x^2} + \frac{\cos x + x \sin x}{(\cos x)^2}$
9	y'= 4 secx lann - cse2n	$y'=-x\sin u-\cos u$ + $\cos u+x\sin u$ ( $\cos u$ ) <sup>2</sup>
	$y = x^2 \sin x + 2x \cos x - 2 \sin x$	14 . x 1 mg (X - Z ) = (X 1 mg (8)
	0	$-2(x \frac{d}{du} \cos u + \cos u \frac{d}{du}x) - 2(\frac{d}{dx} \sin x)$
U	$y' = \chi^2 \cos n + 2 \chi \sin n$	+2(-xsinn+cosn)-2cosn
	y'= x2cosx + 2xsiun-	- 2 x sin n + 2 dosn - 2 dosn
J.	$y' = k^2 \cos n$	
<b>D</b>	$y = x^2 \cos x - 2x \sin x$	inn - 2 cosn
*	$y' = x^2 d \cos n + \cos x$	$\frac{d}{dn}x^2 - 2\left(\frac{\pi}{dn}\frac{d}{dn}\frac{\sin n + \sin n d}{dn}\right) - 2\left(\frac{d}{dn}\cos x\right)$
3		osic - 2 ndosu -2sign+ 2sign
N.	y = -x sinx + 2x60	/ *************************************
3	y' =	$-\chi^2 \sin \chi$
7	2 (462.1)	

		Date
1		23) $Y = 4 - \theta^2 \sin \theta$ . 24) $Y = \theta \sin \theta + \cos \theta$ .
0	0 uotient Rule	Power Rule + Product Power Rule + Product Rule.
0	$S' = \frac{1}{\cot t - 1}$	Rule $Y' = -\theta(\cos\theta + \partial\sin\theta)$ $Y' = \theta\cos\theta$
•	B Y = secocsed.	
	Roduct Rule	Product Rule. Power Rule.
0	Y'= Sec 20 - 1120	$Y' = \cos\theta + \sec^2\theta$ . $P' = \sec^2q$ .
0		1 (28) n sing, + cosq, (30) p = tang,
3	(28) P= ((1+cscq) co	(9)   = - (0591. 1+ tang
10	Power + Product Fu	
	P'=-sing-csczq	
10		B2 p- 39 + Tang
	3) p= qsinq q2-1	32) $p = 3q + lang$ $qsecq$ Onotient + Power Rule.
	Onotient + Product	
69	Rule	P = sec <sup>3</sup> q-39 <sup>3</sup> secqtang-gsecqtang- Secqtang
<i>57</i> 0.	$P' = q^3 \cos q - q^2 \sin q$	-geosg-sing (gseeg)2
	(92-	1)2
(B)	(33) Find y" if	39 Find y (4): b) y=9cosn.
-	a) y = cscx	a) $y=-2\sin n$ . $y'=-9\sin n$
	y"= 2 csc3x - cscx)	$y' = -2\cos n$ $y'' = -9\cos n$ $y'' = -3(-\sin n)$
-	b) y = secx	$y''' = 2\cos n$ $y''' = 9\sin n$
- In	y"= 2sec3n-sein	$y'''' = -2\sin n$ $y'''' = 9\cos n$ $-(THE END)$
J.C.		