Camlin Page
1 Acc 8
ai n2. and 420 both age soll.
of initial nature problem
2,4-424
y(0) = y'(0) =0 XER
5 4 4m 41. 7 (x2+6) y 20
y4-4n y1. + (x2+6)y n2 x2
Q2 find come y= y(n) passing thorough
origin for which girl and
line $y = x$ is tangent.
y' - y' = 0 $y'(x) = 1$
p=y1 y1(0)=1
Dl = 4l
y(x) = 07-1
$- \frac{1}{2} - $
$y = \cos(an+b)$ $y' = \sin(an+b) \times a$
y' = - sin (an +b) x.a.
$yu = -\cos(an+b)xa^2$
$yu = -yxa^2$
costy = and
$\frac{-1}{\sqrt{1-y^2}} \times \frac{y}{\sqrt{1-y^2}} = a$
y 4 = - y (9)-
(1-92)
910000
J. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.

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find the value of m such that us om i.
Just the value of m such that ye om 2.
o' my ma
$m^2 e^{m\eta} + 3m e^{m\eta} + 2e^{m\eta} = 0$
$(m^2+3m+2)=0$
$\frac{m=-3\pm \sqrt{9-4/2}=-3\pm 1}{2}=-2,7$
; y 11 + P(x) y 1 + q(x) y = 91(x)
XEI
y1 & y2.
y = ay, +by2
$(\alpha u + bu) (4   (\alpha u + bu )$
(ay, + by 2) + py(x) (ay, + by 2) + q(x) (ay, + by 2) = 91(x)
a(y,"+p(n)y,1+ q(n) y,)+ b(y2"+p(n)y,1
+ q(n) y2)=
$\frac{\Im(\chi)}{2}$
$\frac{a(\sigma(n) + b(\sigma(k)) = 1 \times \sigma(n)}{(\sigma(k)) = 1}$
(a46) = 1 always
9 + 1 + 1 = 0 - 0
p(x), q(x) us cont m on given
untomal I
y=x, y=sun are son of 0 or not
$W(y_1, y_2) =  x  sinn  = x con - sinn$
A CONTRACTOR OF THE PROPERTY O
$W(31(0), 35(0) = 0 \times 000 = 0$
M 130

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	Camlin P	age
		09
Wlyi	yi) (n) =0 when n =0	
	y, x yz are not soln of DE (1).	
@7	y, (n) & y2(n) one two som of o	
5	dell M	
	90	
( ) ( ) ( ) ( ) ( ) ( )	y 11 + p(n) y 1+ q(n) y =0	78
	W(y, 42) # 0 41 dy 2 are	lde
	, I I .	
2-12-1	44 + P(n) 4 + 9/(n) 4 20-	Q
	y 1 + P(n) y + q(n) y = 0 - y 2" + P(n) y 11 + q(n) y = 0	0
- (38 ) TO SE	2xy1-0x92	
<b> </b>	42 414 - 4142"+PGO (4142	42 4.1)
- 1120 32000	<u> </u>	15
15	p(x) = 9142 1 - 42414	3
		-
<b>5</b>	W(y142)	20
0	Colculate OV(M)	
20 1.	The Marie College Coll	1
7,81.0 6		
( 8 l	u=21 -> dangent	
	$y=x \rightarrow dangent$ $y(x) = x \qquad y(0) = 0$ $y'(x) = 0 \qquad y''-y' = 0$	
- X X	41(x)=0 44-41.=0	and the second
20 1	xyz are 17 soln	<u> </u>
	yn + p(x) y + q (n) y = 0	
	between two consciller zero	of y
	between two constitute ge	001
	I one zero of 1/2	
- 35/3		
		10 YC

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		Camlin Page			
-	9, (X). 20				
14	AN en something to the second	Y A			
	92(N2)20	* >			
	J NO E (U1) St 92	N) 20			
5					
	W ( 9192) (N) = 9192 - 9	4 3 4 4 5 0 5			
Now lot us assume that y, of y 2 have common zeros sx.					
1	w(y, yz) =0 But given that y, & yz, asie				
	LI				
	W(y, y2) (ni) to	=) contradiction			
	(9) Now, lot x, x x 2 cor	e duo Consecutivo			
15	Jeroel of y				
	y, (n,) 20				
	$y_{1}(\chi_{2}) \ge 0$ But $y_{1}^{2} \ne 0 \ d \ y_{2}^{2}$	(01) = 0			
	15th 9( 7 )	) (N) =0			
20	w(9,42)=4,42	1-4241			
	w(y,y2)(x1) =	- y2(n) y1'(x1)			
	X	X2 87 X1 X2			
25					
	WLG, W(y, y2)(x1)>	0			
1	4, (x1)>0 then y,1	(2) (0 00g			
	Mice worda				
	y, (xi) ) a and	y; (x2) <0			