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	[7111116- (1811067)
	- TRIGONOMETRY (CLASS NO= 8)
	Trigonometre equations - In equation which contains
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	Josephian (valur of 21)
Q N	1 10 21-01
(41	1) (2) General Solution A SIT
	, , , ,
<u>Q</u> ~	The payment of the day
,	$\sin \gamma = -\frac{1}{2}$
	$\overline{\Pi} \overline{Siny} = \overline{Sin(3+3)} \overline{\Pi} \overline{Siny} = \overline{Sin(23-3)}$
	Siny = sin(73) $Siny = sin(143)$
	(6)
	y = 77 and $y = 1/7$ Any
(DA 2	Find the principal solution of the epighan
$=\frac{Q_{\Lambda 2}}{=}$	$\left(cs(31)=-\frac{1}{\sqrt{3}}\right)$
Soh	
	'/
	(01/31)=(01/31)=(01/31)=(01/51)
	$3\gamma = 37$ $3\gamma = 57$
•	y y
	1- 4 m 1 = 51 m
(D) A) ?	Buch the Countries Contract
ON?	and the principal solution $2(0+(2x) = -2$
₹.	$(cat(2\pi) = -1)$ # $fan(2\pi) = fan(7-3)$ # $fan(2\pi) = fan(2\pi-3)$
	7-7(24)=-1 24= 37 24= 37
	$\begin{array}{c c} 1 & 1 & 27 & 4n \\ \hline 3 & 7 & CLASSTIME' \end{array}$
	[CLASSIIME]

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cremeral solution:	
Typu 1	
$(1) \sin 0 = 0 \qquad 0 = 0 \qquad \sin(\pi) = 0$	Sin (22)=0 Sin (34)=0
then $0 = n\lambda$; $n \in \mathbb{Z}$	Jin (-17) = 0
	(0)(51)=0(0)(71)=0 (0)(51)=0(0)=0
$0 = \frac{(2n+1)2}{2} n \in \mathbb{Z}$	
$\frac{1}{10-n1} \frac{1}{10-n1} = 0$	
Typi=2	
(1) Sino=sina => 0= n7+(-1) a	- A
(21 CO10 = CQQ => 0 = 2nn ± 4	7 n 6 2
(8) tono= ton x => 0= 202 + 4	
$\frac{ p \cdot c }{ c } = \frac{ c }{ $	
$\frac{\partial}{\partial x} = \frac{\partial x}{\partial x} \left(\frac{\partial x}{\partial x} \right) \cdot \frac{\partial x}{\partial x} \left(\frac{\partial x}{\partial x} \right) = 0$	
sin(Q+x)-sin(Q-x)-o	
$= \sqrt{\frac{\sin(0+\alpha)}{2}} = 0 \sqrt{\sin(0-\alpha)} = 0$	•
$= \frac{1}{2} \frac{0+d-n}{2} \frac{1}{2} \frac{0-d-n}{2}$	
$20 = 2n\pi - 4 0 = 2n\pi + 4$ $0 = 2n\pi + 4 n \in \mathbb{Z}$	
	(CLASSTIME)

	Topic:
(DN 1	$\frac{Trigo c.lasi = 8}{Sinx = -1}$
	$\frac{1}{(GR)}$
	$\frac{Sin x = Sin(x+3)}{Sin x = Sin(-3)}$
	$Siny = Sin(77)$ hue $\phi = 26$
	Compare with forsing = sind = - 3
	hen 0=x; 4=77 0=nn+(-1)nx
	Soln 0= nx + (-1)nx x = nx + (-1)n(-7)
	7= mn + (-1) n = x= mn + (-1) n+1.]
Q 12	$\int dy Ca(3x) = -1$
	CO(31)=CO(7-3)
	COS (37/2 COS (27/3)
	Comp with $COO = COO$
	O=3x; $A=2x/3SON= O=2x/3$
	$= 0 = 2n\pi \pm \alpha$ $3\gamma = 2n\pi \pm 2\pi$
	$\gamma = \frac{2m\eta}{3} + \frac{3}{8} = \frac{2\eta}{8}$
, , , , , , , , , , , , , , , , , , , ,	<u> </u>
<u>O_13</u>	Solu Sin (64) - Sin (471) + Sin (27) = 0
SOL	(Sin(64) + sin(24)) - sin(4x) =0
	= 25n (4x) ca (3x) - sn(4x)-0
	= 5in(4x)(2cos(3x)-1)=0
	$= 3 \sin(4\pi) = 0 $ $= 3 \cos(3\pi) - 1 = 0$ $= 3 \cos(3\pi) = \frac{1}{2}$
	$\mathcal{H} = \frac{2}{3}$ $\mathcal{H} = \frac{1}{3}$

	Taus (class -8) Page No.:
	hu 0-321; 4-7/3
	$Solv$ $O = 2na \pm q$
	$3\gamma = 2n\lambda \pm 3/3$
	$\frac{\gamma = 2n\eta + \eta}{3} \text{nez}$
OMY	5014 $a^2 ca^2 x$ + $357nx = 0$
50	$2\left(1-5n^2x\right)+35nx=0$
	7 2-25m2x +35mx=0
	$=1$ $2\sin^2x$ $-3\sin x$ $-2=0$
	$25n^2x - 45nx + 5nx - 2 = 0$
	2 25ny (5inx-L) +1 (5inx-L)=0
	- (Sinx-2) (2Sinx+1)=0
	$Sin\gamma = 2 \qquad 2Sin\gamma + 1 = 0$
	(X) NOT POMBY SINY = -1
	-1 \(\sino \(\) \(\) \(\sin \) \(\) \
	hun 0=x; 4= 7
	$0 = n\lambda + (-1)^n \alpha$
	$\chi = nn + (-1)^{n} (73) n \in \mathbb{Z}$
On. 5	+ Solve Sinx - 3sin(2x) + sin(3x) = cax - 3ca(2x) + ca(3x)
200	$\left(\sin(3n) + \sin n\right) - 3\sin(2n) = \left(\cos(3n) + \cos n\right) - 3\cos(2n)$
-	$2\sin(2\pi) \cdot \cos(\pi) - 3\sin(2\pi) = 2\cos(2\pi) \cdot \cos(\pi) - 3\cos(2\pi)$
2	$\frac{1}{2} \frac{\sin(9\pi)}{(2\pi)} \left(\frac{2\cos(2\pi)}{2\cos(2\pi)} \left(\frac{2\cos(2\pi)}{2\cos(2\pi)} \right) \right)$
	$= \frac{51n(2\pi)}{2(\alpha x-3)} \left(\frac{2(\alpha x-3)}{2(\alpha x-3)} - \frac{(\alpha(2\pi))(2(\alpha x-3))}{2(\alpha x-3)} - 0\right)$
	$= 1 \left(\frac{2(\alpha_{1} - 3)}{5m(2\pi)} - (\alpha(2\pi)) - 0 \right)$
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	Topic :
	17190 class-8 (5)
	$\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}$
	ton(2x) = ton(3) $0 = 22 $ $ d = 3/4$
	0 = nn + q $2x = nn + n/q$
	N= m3 + 3 nc2 An
01.6	Solve tano + tan(20) + 53 tano tan(20) = 53
201-	tono + ton(20) = 5- 53 tono ton (20)
	=> fino + fu(20) = \(\ightarrow \) (1-timo tim(20))
	=> tm0+ tm(2a) (
	1 -tm 0 tm (20)
	$rac{1}{2} + rac{1}{2} + rac{$
	$\Rightarrow \pm n(30) = \sqrt{3}$
	=> tn(3/3)
	Ser. O=nata)
	-7 30 = nn + n/3
	Form = 0= m + 2 ; n + 2 An
	T acao+ bonno=c
Sk	2 pivide both sides by Jai+12
	$\frac{1}{1200} = \frac{1}{1200}$

	Taiso (class 8) Page No.:
OA.	
_	
	fain acao + bsin a = c
	a=3 $b=-1$ $c=52$
	divided both sides by Ja2+ b2 = J3+1 = 2
	=> 13 (do - 1 sino= 12 = 1
	=> Ca(1)(a) - Sin(3) Sina = Ca(1/4)
	$\Rightarrow (a(0+3)=(a)$
	hen 4= 7/4
	SOL 3
	$\frac{1}{2} = 2n\pi \pm 3/y$
	0= 2nn + 2 - 7
	0= 2mn+3-7 0=2nn-3-3
	Q= 2nn + A D= 2nn -51 nez
Q 1.8-	n + 2
2 1 0	1 1 1 1 B
	(a(2)(d0 + Sing sind = ca/6)
30,	$\frac{\sqrt{2}}{(00)} - \frac{\sin \varphi}{(00)} = 1$
	$ \Rightarrow (\alpha/\alpha)-\eta =(\alpha/\alpha)$
	$\frac{1}{4} \sqrt{2} - \sin \phi = CdQ$
	$\int_{R}^{2} \frac{\cos \phi + \sin \phi = \sqrt{2}}{2} = \frac{\sin \phi}{2} = \frac{\sin \phi}{2} = \frac{\cos \phi}{2}$
	Tan acaut minosc
	1 diver by 11+1 = 5
	LCOO + LSino - 1
	2
	(CLASSTIME')

	Topic:
On.	9 + 9 Secx. (03(5x)+1=0 when 0 <x<=3< th=""></x<=3<>
20	Secu. (9(51)+1=0
	(d) -(d(sn) +1=0
	Col(2n) + (cd) = 0
	COLN
	= (a(sn) +(au = 0
	$=1$ $2(8(31)\cdot(8(21)=0)$
	$-1 (9(3n) \cdot (9(2n) = 0)$
	(9(3x)=0) $(9(2x)=0)$
	3x = 7 $3x = 37$ $3x = 57$
	2 2 27 27 27 27 27 27
	$\chi = \frac{3}{3} \left \frac{3}{3} \right = \frac{5}{3} \left \frac{3}{3} \right = $
	(R) (Y) (X)
	[£(0,37.1
	16,37
	" Any 3/2, 7/4 Any

TRIGONOMETRY (7-8) Page No.:	~
(WORKSHEET NO: 8) Class No: 8	1)
ON 1 - End the Pernand describes	
On $3 \rightarrow 6$ and the principal solution (i) $(0t \times 2 - \sqrt{3})$ (2) $2 \sec x - y = 0$	
() LSC(X - Y = 0	
On2 - Solve COS(34) + COX - COS(24) =0	
$\frac{1}{2}\left(\frac{1}{2}\left(\frac{1}{2}\right)\right)=0$	
On 3+ Solve Sec2(2x) = 1-ten(2x)	
(() - (- 1 m ())	
ONY + Solve Sinx + Sin/3x) + G. (CX) = 0	
ON 4 + Solve Sinx + Sin(3x) + Sin(5x) = 0	
Qx.5- Solve 50020 + 75n20 -6=0	
- tsin 0 -0-0	
01.6 - Sive Coto + tena = 2 cosi 10	
On.7 + 1/2 & sin20 = 3 calo where 0 = 0 = 27	
On.7 ty Isin20 = 3 caso where 0 \le 0 \le 27	
The value of the	
04-8 Solve Ca+s Ca+ sn0=1	
	_
Ong + Soly Coto + Concais	
0 4 10 5014 ten 0 + ten (20) + ten 0 ten (20) =1	
On 11 + Solu teno + ten (0+3) + ten (0+22) = 3	
On 11 + Solu teno + ten (O+3) + ten (O+21) = 3 Hint use farmula ten (A+B)	
On 12 + Soly fon20 + (1-53) ton0 - 55 =0	
ON13-	
SO[M] = (OS(27))	
Only $Soly$ $Sin(2x) + (ax = a)$ Hind use farmula $Sin(20)$	
A CONTRACT OF THE PARTY OF THE	
CLASSTIM	(E)

Page No.: Date.:.... Topic:..... Answers (i) 57 117 (2) $\frac{7}{3}$ $\frac{57}{3}$ $\chi = (2n+1)$ $\chi = 2nx \pm 3$ $\pi \in \mathbb{Z}$ $N=\frac{n\pi}{2}$; $N=\frac{n\pi}{2}+\frac{3\pi}{8}$ $n\in\mathbb{Z}$ N=n3; N= nx±3; n+Z (4 N=nnta/y n+Z (5) Q = 2nn ± 7/3; n € 2 6 0=7/3, 57/3 (7) 0= (-1) 7 7 - 7 (8 (08) 0 = 2nn +] ; 0= 2nn-7 ; ntZ 0 = 2nn + 7/3 0-13 +7; nc2 Q= n1 + 7 ; n + 2 0= n71-3; 0= n7+3; nEZ NENT MEZ X= na/2

CLASSTIME"

 $\mathcal{H} = (2n+1)\frac{3}{3}, n \in \mathbb{Z}$