co20 es.no2 1 Cus (A+B): Cos Acos B - SinAsins sin (A+13)= sin A cos B + ces Asins Jung H = 2 sen A cos H COD 2A = COD2A - Sin2A = 2 cos A - 1 => cos A = 1+ cos 2A $=1-2\sin^2A$ s Sint : 1- CD2A (0)2A = 1+ Cos 2A H = -X COS X = 1+ COSX > COS X = + 1 + COSX Sin A = 1-cos A) sin x = + /1-cos+

Smit = 3 , 1 = GI 900 < 1 < 110 WA = - 4 E G QI as sina A = 2 suit as A =2 (=)(-4.) = - 24 b) want = cos2+ - sin2+ $=\frac{16}{25}-\frac{9}{25}$ 2 7 C) tan 2A = - 24 / (the GC) d) 514= 1= (1-cos A) = 1/2 (1+4) = 1/2 = 195 Z 3/101 e) cos 4 = (1+ cos A) = 1/1(1-4) = 1/01 f) fan 1/2 = 3 |

$$\begin{array}{lll}
3 & \text{Hel} & \cos A = \frac{5}{13} & A \in \mathbb{Q} & \frac{270}{1} & \frac{1}{12} & \frac{360}{1} \\
& \sin A = -\frac{12}{13} & \frac{1}{2} \in GII \\
& = 2 \left(-\frac{12}{13} \right) \left(\frac{5}{13} \right) \\
& = \frac{120}{169} \\
& = \frac{120}{169} \\
& = \frac{25}{169} - \frac{104}{169} \\
& = -\frac{119}{169} \\
& = -\frac{119}{169} \\
& = \sqrt{\frac{1}{1}} \left(1 - \frac{5}{13} \right) & \sqrt{\frac{5}{2(13)}} \\
& = \frac{2}{\sqrt{13}} & \sqrt{\frac{1}{2(13)}} \\
& = \sqrt{\frac{1}{2}} \left(1 + \frac{5}{13} \right) & \sqrt{\frac{15}{213}} \\
& = -\frac{3}{\sqrt{13}} \\
& =$$

 $\begin{cases} \int \int da da = -\frac{2}{3} \end{cases}$

$$\tan 2t = 2 \tan 4$$

$$1 - \tan^2 4$$

$$\tan 2t = \frac{1 - \cosh 4}{5mA} = \frac{\sinh 4}{1 + \cosh 4}$$

$$\tan 15^\circ = \tan \left(\frac{30}{2}\right)^\circ$$

$$= \frac{1 - \cos 30^\circ}{5 \cdot n30^\circ}$$

$$= \frac{1 - \frac{\sqrt{3}}{2}}{2}$$

$$= \frac{2 - \sqrt{3}}{2}$$

$$= \frac{2 - \sqrt{3$$

 $421 \quad Coo3x = Coox - 3 coox sin^2x$ Coo3x = coo (x + 2x) $= coox coo2x - sin^2x sin^2x$ $= coox (coo^2x - sin^2x) - sin x (2sin + coox)$ $= coo3x - coox sin^2x - 2 coox sin^2x$ $= coo3x - 3 coox sin^2x - 3$

 $430 \quad \cos 4x = \cos^4 x - 6 \sin^3 x \cos^3 x + \sin^4 x$ $(\cos 4x - \cot 2(2x))$ $= (\cos^2 2x - \sin^2 2x)$ $= (\cos^2 2x)^2 - (\sin 2x)^2$ $= (\cos^2 x - \sin^2 x)^2 - (2\sin x \cos x)^2$ $= \cos^4 x - 2\sin^2 x \cos^2 x + \sin^4 x$ $- 4\sin^2 x \cos^2 x$ $= \cos^4 x - 6\sin^2 x \cos^2 x + \sin^4 x$

ftu4 $\int ee^{2}x = \frac{2secx+2}{secx+2+coox}$

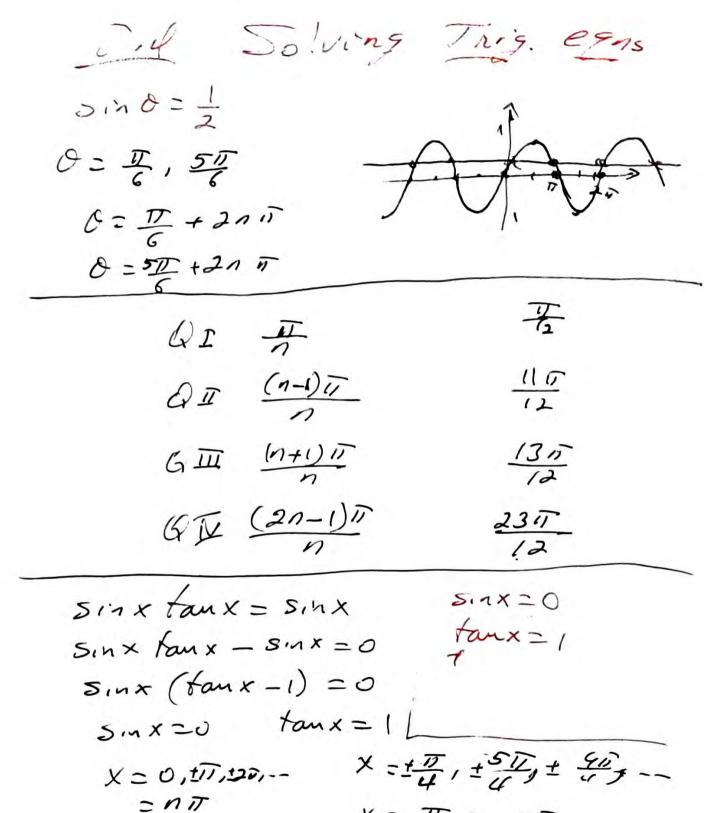
$$\frac{3ec^{2}x}{2} = \frac{1}{\cos^{2}x}$$

$$= \frac{1}{\frac{1+\cos x}{2}}$$

$$= \frac{2}{1+\cos x} \frac{1+\sec x}{1+\sec x}$$

$$= \frac{2+2\sec x}{1+\sec x+\cos x+\cos x}$$

$$= \frac{2+2\sec x}{2+\sec x+\cos x}$$



X= # 17

Ex Solve 2, sin2 t- cost-1=0 2(1- cost) - cost -1 =0 181 2-2002/-coot-1=0 - 2 cust - cost +1 = 0 Cost = -1 cost = $\frac{1}{2}$ t=1 t=1 150 t=11+241, t= I +200, t= 50 +200 [0,27) t: 0, 3, 50 4 sin 2 x tanx - tanx = 0 [0, 27) tanx (4 sin 2x - 1) = 0 45, h2x-1=0 taux = 0 4 sin 3 = 1 Sin2x=1 => 5111X = £ = $X = 0, \overline{u}, \overline{6}, \frac{5\overline{u}}{6}, \frac{7\overline{u}}{6}, \frac{11\overline{u}}{6}$

-x solve: Coctau-4=0 [0,10] (csc2u-2) (csc2u+2)=0 Csc 2u = = = 2 (SC224=2 (SC24 = ± 1/2 = 1 Sin 24 = + 2U= II, 30, 50, 70 U= 7, 30, 50, 70, 90, 110, 130 5 sino tano - 10 tano + 35 mo - 6 = 0 5 Kano (sino-2) + 3 (sino-2) =0 (5 fand +3) (sind -2)=0 sin 0 = 2 > 1 # fan 0 = -= 0 = tan 3 10 = 07 - fan 3 0 = 20 - fan 3

#10 2, m2x = 1- Sinx [0,24) 25in2x+Sinx-1=0 Sin x = -1 $Sin x = \frac{1}{2}$ X = 311, 11, 500 12 (1- sinx)=(3 cosx) [0,20) 1-2511x+5112x=3cos2x Sin2x-2sinx +1 -3 (1-, sin2x)=0 45112x-2514x-2=0 Sin x = 1 $Sin x = \frac{-1}{2}$ X = # , 75 , 11 m EST 1- Sinx = 13' Cox 1 = V3 COOX + Sinx (= = Cox + = seix CUS \$ CUS X CUS II + S'1X S. M. G (X-#) x-で= 子のX=墨1 X- = 5 = 5 = 1 | V |

$$\frac{2d}{dt} = \frac{1}{2} \cdot \frac{1}{4}$$

$$\frac{1}{2} \cdot \frac{1}{4} \cdot \frac{1}{4}$$

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