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* ULTIMATE MATHEMATICS -

(BY: AJAY MITTAL: 9891067390)

TRIGONOMETRY CLASS NO: 4 (T-4)

(1) 251nAcaB = Sin(A+B) + Sin(A-B) (-) & (a) A SING = SIN (A+B) - SIN (A-B) (3) 2001ACOB= COS(A+B) + COS(A-B) *(41 ofsinAsinB= (05/A-8) - (01/A+15) ONS 1 8 Now that SIM (10) SIM (30) SIM (50) SIM (70)= 18 4 Sin(10) Sin(30) Sin(50) Sin(70) = 1 Sin(10) Sin(50) Sin(70) = 4 [25in (10) 5in (50)]. Sin (70) = 4 (cor(-40') - cor(60')] . sin (70') = 4 (cos(40) - 1) · sin(70) = 4 (Sm (70) (08/40) - 1 Sm (70)) = 1 251n(70)(a(40) - 51n(70))

> = = = = sin(10) +sin(30) -sin(70)] = = = = (sin(110) + 1 - sin(70)]

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ULTIMATE MATHEMATICS

$$= \frac{1}{8} \left(\frac{d\cos(10^{\circ} + 7^{\circ})}{3\cos(10^{\circ} + 7^{\circ})} + \frac{1}{2} \right)$$

$$= \frac{1}{8} \left(\frac{d\cos(96)}{3\cos(10)} + \frac{1}{2} - \frac{1}{3\cos(76)} + \frac{1}{2} \right)$$

$$= \frac{1}{8} \left(\frac{d\cos(96)}{3\cos(10)} + \frac{1}{2} - \frac{1}{3\cos(76)} + \frac{1}{2} - \frac{1}{3\cos(76)} \right)$$

$$= \frac{1}{8} \left(\frac{d\cos(10)}{3\cos(10)} + \frac{1}{2} - \frac{1}{3\cos(76)} \right)$$

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$$= \frac{1}{8} \left(\frac{d\cos(10)}{3\cos(10)} + \frac{1}{3\cos(10)} + \frac{1}{3\cos(10)} + \frac{1}{3\cos(10)} + \frac{1}{3\cos(10)} \right)$$

$$= \frac{1}{8} \left(\frac{d\cos(10)}{3\cos(10)} + \frac{1}{2} - \frac{1}{3\cos(10)} + \frac{1}{3$$

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$$\begin{array}{lll}
(T-4) & pay: 4 \\
(T-4) & pay: 4 \\
(G(20) \cdot GQ - G(30) \cdot G(40) & = fn(50) \cdot fn(50) \\
1 & G(20) \cdot GQ - G(30) \cdot G(40) & = fn(50) \cdot fn(50) \\
& = \frac{1}{2} \left(2G(20) \cdot GQ - 2G(30) \cdot GQ(40) \right) \\
& = \frac{1}{2} \left(G(20+4) + G(20-9) - GG(30+40) + GG(30-90) \\
& = \frac{1}{2} \left(G(50) + GG(30) - GG(150) - GG(150) \right) \\
& = \frac{1}{2} \left(G(50) + GG(30) - GG(150) - GG(150) \right) \\
& = \frac{1}{2} \left(GG(50) + GG(30) - GG(150) - GG(150) \right) \\
& = \frac{1}{2} \left(GG(50) + GG(30) - GG(150) - GG(150) \right) \\
& = \frac{1}{2} \left(GG(50) - GG(50) - GG(150) - GG(150) \right) \\
& = \frac{1}{2} \left(GG(50) - GG(50) - GG(150) - GG(150) - GG(150) \right) \\
& = \frac{1}{2} \left(GG(50) - GG(50) - GG(50) - GG(50) - GG(50) - GG(50) - GG(50) \right) \\
& = \frac{1}{2} \left(GG(50) - GG(50) -$$

- ULTIMATE MATHEMATICS + (7-4) page = 5 (15) Lhy (CORA + rais) 7 + (SINA + SINB) 7

SINA-SINB) 1

ECOLA - COLB) - (269 (A+8) .cq (A-8)) + (25) (A+8) (A+8) (A+8) (A+8) (A+8) (A+8) $\left(\operatorname{Cot}\left(\frac{A-B}{2}\right)\right)^{n}+\left(-\operatorname{Cot}\left(\frac{A-B}{2}\right)\right)^{n}$ (0+(A=B)) + (0+(A=B)) of Cot n (A=B) (Cota) = cot of County nroad (a+(A=B)) - (c+(A=B))

TRIGONOMETRY Class XI	
TopicDate	
On 1 - Show that (05(20) (01(40) (01(60) (01(80))= 16	Total I
On. 2+ Snew trat sin(10) sin(30) sin(50) sin(70)= 16	
On 3 - Snew trut sin(20) sin(40) sin(80) = 3	
On 4+ Show tout (a(10) (as(30) (as(50)) (a)(70) = 3	
an 5 & Show that ten (20) ten (40) ten (60) ten (80) = 3	
On 6+ Show that ten(20) ten(30) ten(40) ten(80)=1	
On 7 - Snow that 4 cos(12.) cos(48) cos(72.) = cos(36.)	
On-8 + Snow that SinA. Sin (60 - A) . Sin (60 + A) = 4 sin BA)	
049 + Show that 45100 Sin (3+0) Sin (27+0) = Sin (30)	
On 10 + Show that 2(05(13) (05(97) + cos(37) + cos(57) = 0	
On 11 + snow that (a(20) (a @ -(a(30) (a(90) - sin/so).sin/so)	1
On- 12 + 8hu that Cao. Cao - cas(30) cas(90) - sin (70) sin (40)	
On 13 + Show that $\left(\frac{CdA+CdB}{SinA-SinB}\right)^n + \left(\frac{SinA+SinB}{CdA-CdB}\right)^n + \left(\frac{2Cot^n(A-B)}{SinA-SinB}\right)^n + \left(\frac{SinA+SinB}{CdA-CdB}\right)^n + \frac{2Cot^n(A-B)}{sinA-SinB}$ On 14 + $\frac{1}{2}$ $\left(\frac{Cd(A-B)}{CdA-CdB}\right)^n + \frac{1}{2}$ $\left(\frac{CdA-CdB}{CdA-CdB}\right)^n + \frac{1}{2}$ $\left(\frac{CdA-CdB}\right)^n + \frac{1}{2}$ $\left(\frac{CdA-CdB}{CdA-CdB}\right)^n + \frac{1}{2}$ $\left($	
(0: when n	0
On14+ 2 (a(x-p) + ca(p-x) + ca(x-x)= -3/2 show has	
Caxtcap + cay = sing + sing + sing - o	