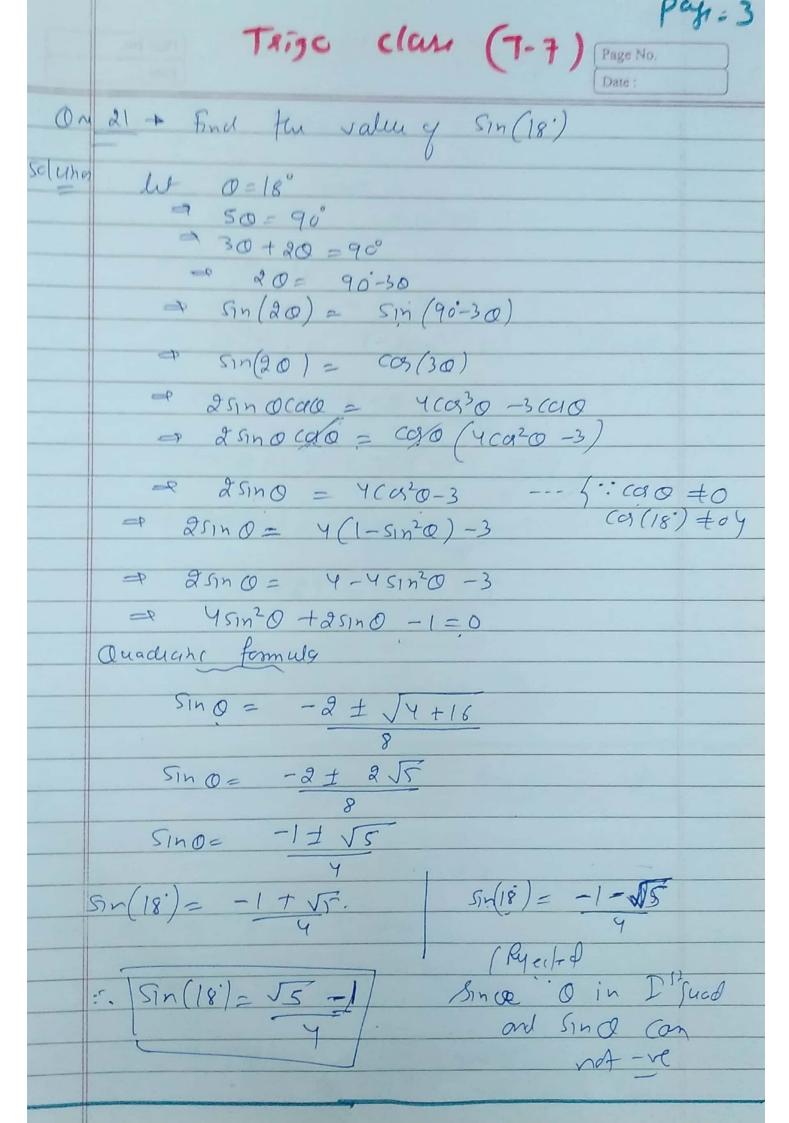
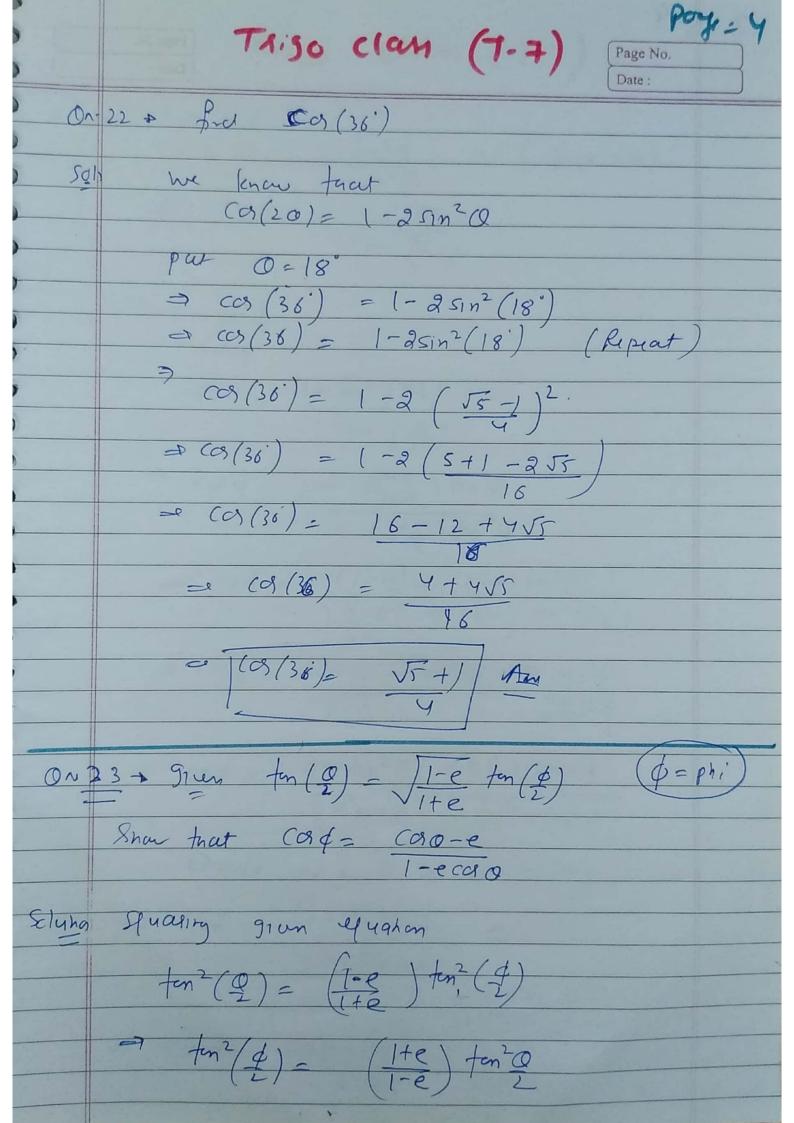
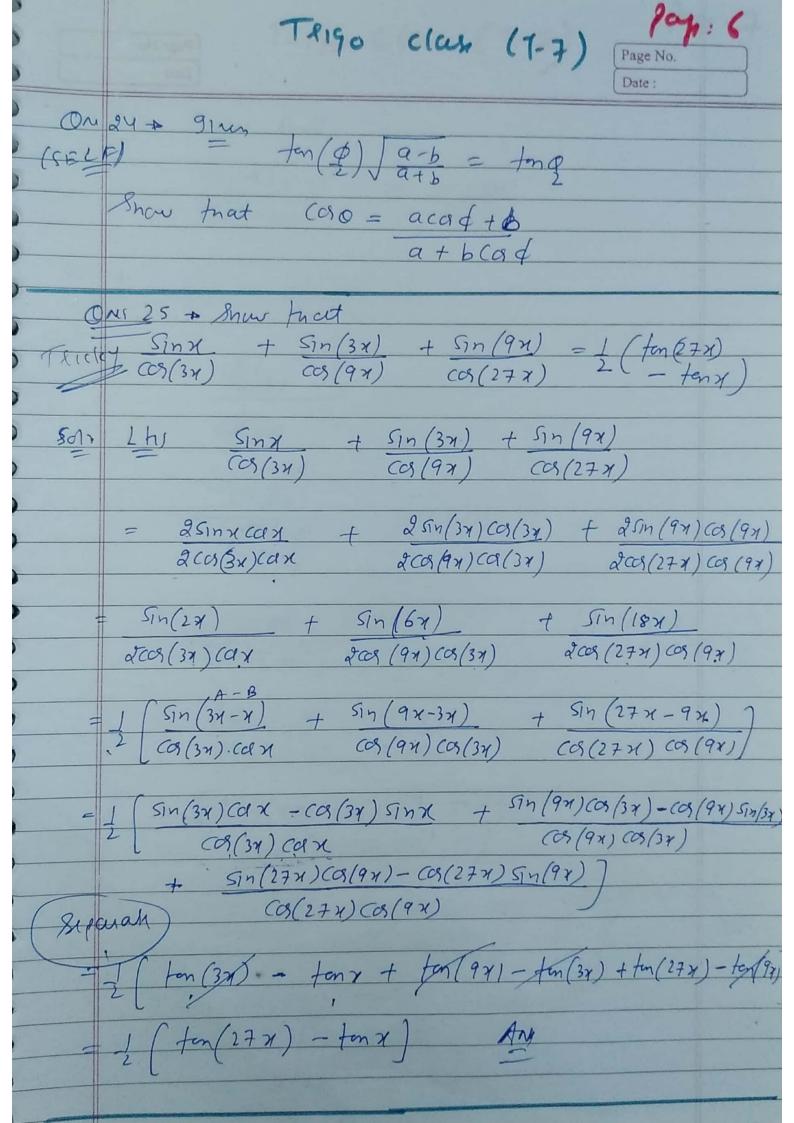
(1) - ULTIMATE MATHE MAGAINTICS (BY: AJAY MITTAL: 9891067390) TRIGO CLASS NO: 7 (7-7) 9 & show that COS3A + COS3(120°+A) + COS3(240°+A) = 3 COS(3A) Take Lhs (03)A + (08) (120+A) + (08) (240+A) we lenow that (08/30) = 4000 - 300 \Rightarrow $\cos^3 0 = 3(0.0 + \cos(30))$ 3 cos A + cos(3A) + 3 cos(120+A) + cos(360°+3A) + 3cos (240+A) + (08 (720+34) 1 3cos A + cos(3A) + 3cos(120+A) + cos(3A) + 3cos(240+A) + (08(3A)) (3COS(3A) + 3COS A + 3COS(120+A) +3COS(240+A) (COS(3A) + COSA + COS(120+A) + COS(240+A) (08(3A) + 2 cos (120+A) cos (120) + cos (120+A) (cs(3A) + 3 cs(120+A) (cs(180+68) + cos (120+A) (03(3A) + 2(03 (120+A) x (-1) + (03 (120+A) 3 (08(3A) - cos(12E+A) + cos(12E+A) = 3 (08(3A) Ams

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Page: 5 Class (T-7) Page No. T1190 we enow that Cos (20) = 1-ten20 -- { farmulay 1+ten2 Q (0) (0) (- ten2 (0/2) 1+ten2 (0/2) Taking Lhs Cad =) (cs of = 1 - ton2 (\$/2) 1 + ten2 (\$/L) - (I+e) ten Q = COS \$ = 1 + (1+e) ten20 $(084 = (1-e) - (1+e) + on^{2}(0/2)$ (1-e) + (1+e) ten2 (0/2) → (a) d = 1-e - ten2 g - e ten2 g 1-e + ten20 + e ten29 (1-ten2 0) - e (1+ten2 0) = ca d = (1+ten20) -e(1-ten20) Dinde NED by (1+ton2) (1 - ton2 P2) \Rightarrow $(\alpha \phi =$ - e (1+m20/2 → Caf= Cao-e PROVED 1- ecoro



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On 26 + Show that

Sec (80) -1 = ton (80) tan (20) Sec (40) -1

\$14x40 Lhs &((80) -) Sec (40) -

= (05/80) -1 (05/40)

1-(0(80) 00/80 1-103(40) COS(40)

= (1-00(80)).00(40) 11-Ca (20) = 25120 4 (1-cg(40)). (a(80)

= 251n2/40)- (8(40) 25112 (20). COS (80)

= [25n(40).ca(40)]. sin(40 251n2 (20) COS (80)

1251n0000 = Sin (80) x & Sin(20) cos(20) ---= sin(20) 4 851n 2(20) ca(80)

= $SIM(80) \cdot COS(20)$ Sin(20) CO(80)

> = for (80) Any for(20)