Schol Try probact 4.

La. Sec $2x = \frac{1}{\cos 2x} = \frac{\sec^2 x}{2\cos^2 x}$ $= \frac{\sec^2 x}{2 - \sec^2 x}.$ $Cos 2x = Cos^2 x - sn^2 x = (cos x - sin x) (cos x - sin x)$ =) COSZX = COSXL1 SAX, (O) 4x = (O) (2x +2x) = cos 2x sas 2x - sin 2x sin 2x = (2cos2x-1)2 - (2sin2x cos2s)2 = 2cos 4x - 4cos2x +1 - 4 (1-60522) cos22x = 2ces 4x - 4cos 2x+1 - 4(1-(2cos 2x-1)2)(2cos 2x-1) 2005 4x - 4005 2 11 - 4 (2002 x-1) + 4 (2002 x-1)4 = 2 cos 4x - 12 cos 2x + 5 + 4 (1605 x - 32 cos 6x + 24 cos 4x = 64cos 2 - 128cos 2 + 98cos 42 -60cos 22 +9.

3. LA = B + (7-d-B) LE = 17 - (72-2) = 2. | FC| = Ces (2+B), 50 | CC| = Ces (2+B), 50 | Sind. C) [EB] = |EU + |(B) Cos(Q+B) + SINB IABI = Ces B - TABI COSB - BET COSP+B+SIAB. d) | AB| = tand = Sind e) Sind Cos B
Cos d Cos and sin B Cos(a + B) + Sin A sind = Cos & cos & Con (dip) = cos Bcosd-sinpsind 5, 2 > co2x =) 5,2 - co2x >0 4 => - cos (2xx) > 0 = (2x)<0 Ces 2 < 0 wh 17-2πη < >C < 3π -2πη 50 Ces 22 CU www 7+ Th < > < 37 Th.

5. Note asbecrd=20. Thy: (0) (a+b+1) + (0) (b+c+d) + (0) (c+d+a) + (0) (d+a+b) = 2 cos a-26, 2 cos a-d -2 cos a-d 2 cos a-b = 2 cos 2 + b+c cos a-d - 2 cos 2 + ard cos c-b = $-2\cos\frac{b+c}{2}\cos\frac{a-d}{2} - 2\cos\frac{a+d}{2}\cos\frac{c-b}{2}$ = $-2\cos\frac{b+c}{2}\cos\frac{a-d}{2} - 2\cos\frac{a+d}{2}\cos\frac{c-b}{2}$ = $-2\cos\frac{a+d}{2}\cos\frac{a-d}{2} - 2\cos\frac{a+d}{2}\cos\frac{c-b}{2}$ = 2 cos a+d (cos a-d - cos 2-b) = 2cos and (-2sin a+c-b-d sin a-d+b-c) = - 4 cy a+d 510 a+c-211+a+c Sin a+b-27+a+b = - 4 cos 2 sin atc-7 sin atb-7 = -4 (0) and sos atc (0) atb