sind = _ cseo Coso = 1 fano = coto tand = sind coto = Coso sin 20 + cos 20 = 1 tan's + 1 = sector
1 + copo = coeto

seco fano = is suid coso = Sind

sind + Coso = Coso + sind coso

tanx + cotx = sind + Cosx = Sin x + Cos x
Cos x pin x = 1 Cosa suia

Prove : tanx + cosx = sin x (secx + cotx) sinx (secx +cotx) = sinx (cosx + cosx) = Sun x + CUS X = tanx + cosx

Cota +1 = Coca (Cosa + sina) Prove LOCA (CODA + sina) = ___ (CODA + sina) $= \frac{\cos \alpha}{\sin \alpha} + 1$ $= \cot \alpha + 1 \quad \omega$ cost_sint = 1- tant (cosy)2 Cos2f - sin4f (Cos2f + sin4f) (Cos2f + sin4f)
Cos2f = Cos2/ - sin2/ = Cust - singh Cusak = 1 - fan2+ ~ /+ Coso = sin20 ? Cus20 45,40 = 1 $\frac{\sin^2 \alpha}{1-\cos \alpha} = \frac{1-\cos^2 \alpha}{1-\cos \alpha}$ = (1-cv3) (1+cv30) 1-cv30 1+ coso = (1+ coso) 1-coso = 1- cos 0 = sin20 (1+ coso) (1-coso) = singl 1- coso = singl sind = sind a

tan & (1+ cot a) = 1- sin a tan a (1+ cota) = tan a + tan a cota = fan a + 1 = secor $=\frac{1}{\cos^2\alpha}$ Cos 2 +5/12 = 1 $=\frac{1}{1-Sin^2\alpha}$ - + 1-000 = 2 crea + 1+ cvsa = sin a + (1+ (vsa) 2 sin a (1+ cvsa) = sin x + 1+2cox + cox x sin x (1+ cox x) = 2+2000 × sin x (1+ wox) = 2 (1+Cv=x) sinx(1+cv=x) = 2 sui a = 2 CAC X

$$\frac{1+\sin t}{\cot t} = \frac{1+\sin t}{\cot t} \cdot \frac{1-\sin t}{1-\sin t}$$

$$= \frac{1-\sin^2 t}{\cot t} (1-\sin t)$$

$$= \frac{\cos^2 t}{\cot t} (1-\sin t)$$

$$= \frac{\cos^2 t}{1-\sin t}$$

$$Cot^2 + Cos^2 + \cot^2 \cos^2 t$$

$$O = \frac{\pi}{4} - \cot^2 t = 1, \quad cos^2 t = \frac{1}{2}$$

$$cot^2 + \cos^2 t = 1, \quad cos^2 t = \frac{1}{2}$$

$$cot^2 + \cos^2 t = 1, \quad cos^2 t = \frac{1}{2}$$

$$cot^2 + \cos^2 t = \cot^2 t \cos^2 t$$

$$1 + \frac{1}{2} = 1 \cdot \frac{1}{2}$$

$$\frac{3}{2} + \frac{1}{2}$$

$$\cot^2 t + 3\cot^2 t = \cot^2 t \cot^2 t$$

$$\cot^2 t + 3\cot^2 t = \cot^2 t \cot^2 t$$

$$\cot^2 t + 3\cot^2 t = \cot^2 t \cot^2 t$$

$$\cot^2 t + 3\cot^2 t = \cot^2 t \cot^2 t$$

$$\cot^2 t + 3\cot^2 t = \cot^2 t \cot^2 t \cot^2 t$$

$$\cot^2 t + 3\cot^2 t = \cot^2 t \cot$$