ASSIGNMENT NO. 4

TRACOS 30 = TRECOS d -850 VT= 850

85000530 = TRECOS d -0

Ter sind = 850sin30 + 850 Ter sind = 1275 -2

Dividing 1 by 1, tand = 1.732

2 $2F_{x} = 5000030 + 30000500 + 30000520$ = 865N. $2F_{y} = -8000030 + 3000060 + 30000020$ = 112.41 R = 872.3 $d = tan^{-1} \frac{112.41}{865}$ = 740°

For R to be directed along h2. aris,

2 Fx = 0

R = 500 cos3 0+ 300 cos (40+d) + 300 cosd

E Fy = 0

500 sin30 = 300 sin(40+d) + 300 sind

500 sin30 = 800 (sin(40+d) + sind)

$$= 3 m \left[2 sin \frac{40+2d}{2} cos \frac{40}{2} \right]$$

$$= 3 m \left[2 sin \frac{40+2d}{2} cos \frac{40}{2} \right]$$

$$= 6 cos sin 30 = 600 sin \frac{40+2d}{2} cos 20$$

$$= 6 cos 20$$

$$= 6 cos 20$$

$$\angle F_{Y} = 700 + 600 + 650 = 1950N$$
 $\angle F_{X} = 300N$

$$M_{0} = 300 \times 3 + 650 \times 0.2 + 600 \times 1.3 - 700 \times 1.8$$

$$= 550 \text{ N-m}$$