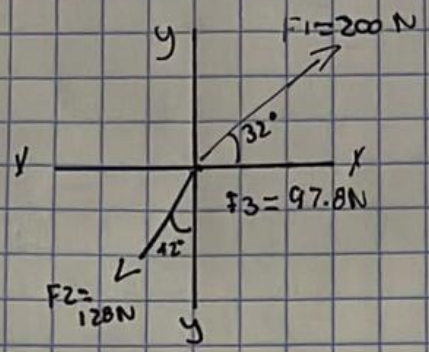
Alumno: Edgar Daniel Santiago Guillen

Licensiatura: Arquitectura

Profesor: ARQ Pedro García López

Cuatrimestre: 4to

Materia: Resistencia de materiales



① Sen 32° = $\frac{F1y}{200N}$ = F1y = Sen 32° (200N) = 105.983 N /

Cos 32° = $\frac{F1x}{200}$ = F1x = Cos 32° (200 N) = 169.609 N /

② Sen 48° = $\frac{F2y}{128}$ = F2y = Sen 48° (128 N) = -95.122 N /

Cos 48° = $\frac{F2x}{128}$ = F2x = Cos 48° (128 N) = -85.648 N /

F3 = F3x = 97.8 N /

ΣFx = 169.609 N - 85.648 N + 97.8 N = 181.761 /

ΣFy = 105.983 N - 95.122 N = 10.861 /

H = $\sqrt{(181.761)^2 + (10.681)^2}$

H = $\sqrt{33037.06 + 117.98}$

H = $\sqrt{33155.022}$

H = 182.085 /

tan θ = Co/CA

θ = $\tan^{-1}$ Co/CA

$\tan^{-1}$ $\frac{10.86}{181.761}$

θ = 0.059

$\tan^{-1}$ (0.059) = 3.376 /

90 - 3.376 = 86.624

360 - 3.376 = 356.624 /