

$F_{up} = F_o$
 $A \cos 50 + B \cos \theta = 200 + 500$
 $0.643A + B \cos \theta = 700$
 $0.643(932) + B \cos \theta = 700$
 $600 + B \cos \theta = 700$
 $B \cos \theta = 100$

$F_{left} = F_{right}$
 $A \sin 50 = B \sin \theta$
 $0.766A = B \sin \theta$
 $0.766(932) = B \sin \theta$
 $714 = B \sin \theta$

$714 = B \sin \theta$
 $100 = B \cos \theta \rightarrow 714 = 100 \tan \theta$
 $\theta = 82^\circ$

$714 = B \sin 82$
 $714 = B$
 $B = 714 \text{ N}$

$CCL = CV$
 $(A \cos 50)(2.5) = 500(2.5) + 200(1.75)$
 $A(0.643)(2.5) = 1250 + 350$
 $1.61A = 1500$
 $A = \frac{1500}{1.61}$
 $A = 932 \text{ N}$

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$F_u = F_o$
 $A \cos 40 + B \cos \theta = 200 + 500$
 $0.766A + B \cos \theta = 700$

$F_c = F_r$
 $A \sin 40 = B \sin \theta$
 $0.643A = B \sin \theta$

$T_{cc} = T_c$
 $(A \cos 40)(3) = (500)(4) + 200(2)$
 $2.3A = 2000 + 400$
 $A = \frac{2400}{2.3}$
 $A = 1043 \text{ N}$

Apr 3-10:36 AM