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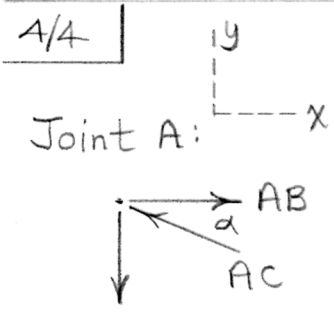
$\alpha = \tan^{-1}\frac{1.25}{3} = 22.6^\circ$

Joint A:



$\left(\cos\alpha = \frac{12}{13},\ \sin\alpha = \frac{5}{13}\right)$

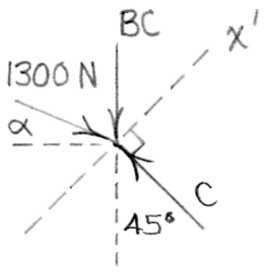
$\Sigma F_y = 0$: $AC\sin\alpha - 500 = 0$

$AC = 1300$ N C

$\Sigma F_x = 0$: $AB - 1300\cos\alpha = 0$

$AB = 1200$ N T

Joint C:



$\Sigma F_{x'} = 0$: $1300\left(\frac{12}{13}\right) - C\frac{\sqrt{2}}{2} = 0$

$C = 1697$ N (reaction)

$\Sigma F_y = 0$: $-1300\left(\frac{5}{13}\right) - BC + 1697\frac{\sqrt{2}}{2} = 0$

$BC = 700$ N C

Could use $\Sigma F_{x'}$ to find BC without involving calculation of C. Nonetheless, observe that changing the 45° support angle would affect BC, but not AB or AC!