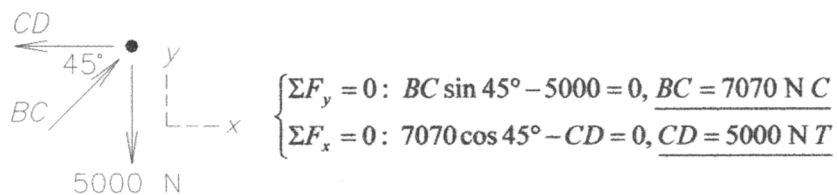


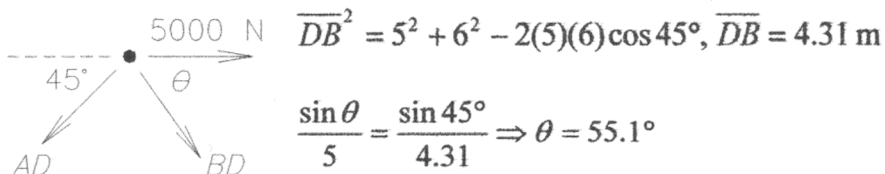
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We can begin at joint C without finding the external reactions.

Joint C:



Joint D:



$$\begin{cases} \Sigma F_x = 0: 5000 + BD \cos 55.1^\circ - AD \cos 45^\circ = 0 \\ \Sigma F_y = 0: -AD \sin 45^\circ - BD \sin 55.1^\circ = 0 \end{cases}$$

Solve simultaneously to obtain:  $\underline{BD = -3590 \text{ N or } 3590 \text{ N C}}$   
 $\underline{AD = 4170 \text{ N T}}$

Joint B:

