

46. $\Sigma \tau = ?$ $\tau = \vec{r} \times \vec{F}$

(out of page is positive)

$$\begin{aligned}\Sigma \tau &= (r_A)(F_A) \sin \phi_A + r_C F_C \sin \phi_C - r_B F_B \sin \phi_B \\ &= (8)(10) \sin 135^\circ + (3_m)(19_N) \sin 60^\circ - (4_m)(16_N) \sin \end{aligned}$$

$$\Sigma \tau = 12.06 \text{ Nm}$$