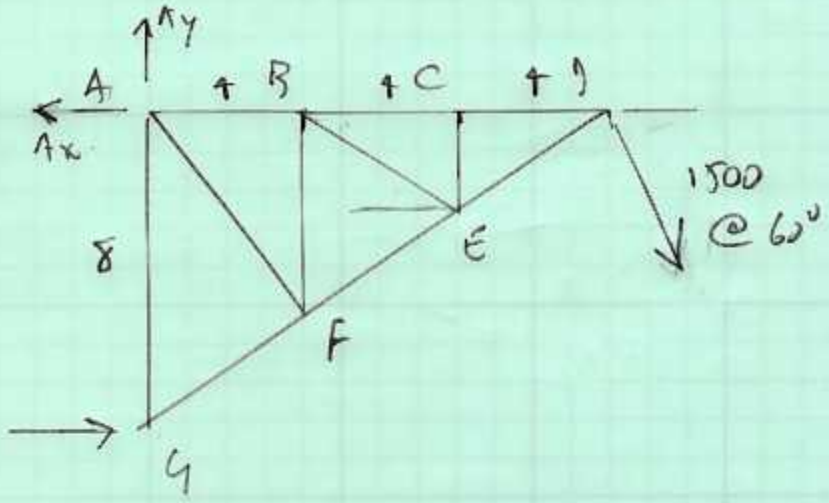


$\Sigma M_A = 0$ (lb-ft)

$\phi = -(1500(\sin 60)(12) + G_x(8)$

$G_x = 1948.556$ lb

$\Sigma M_G = \phi$ (lb-ft)

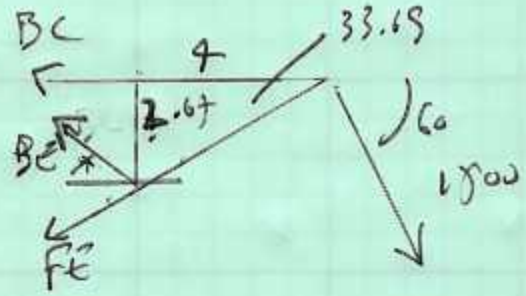
$\phi = +A_x(8) - (1500\cos 60)(8) - (1500\sin 60)(12)$

$A_x = 2698.56$

$\Sigma F_y = \phi$ (lb)

$\phi = +A_y - 1500\sin 60$

$A_y = 1299.04$ lb



$\Sigma M_E = \emptyset$ (lb ft)

$\emptyset = -1500(\cos 60)(2.67) + -(1500 \sin 60)(4)$

$+ BC(2.67)$

$BC = \underline{2696.12}$ lbs

$\Sigma M_D = \emptyset$ (lb ft)

$\emptyset = -BE \sin(33.69)(4)$

$- BE(\cos 33.69)(2.67)$

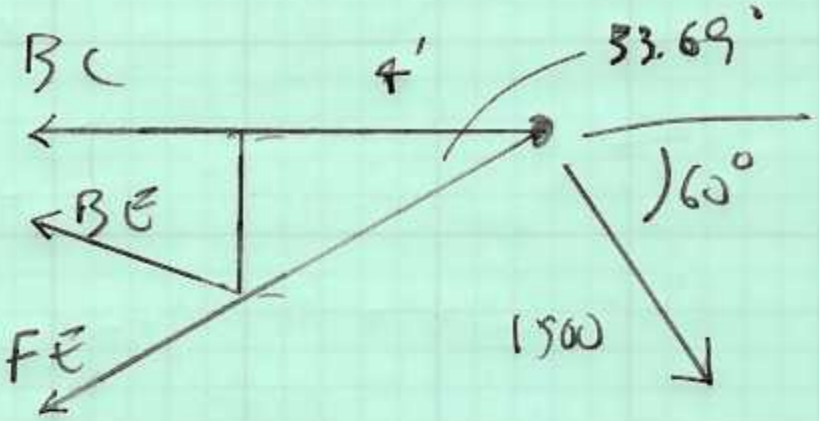
$BE = \underline{0}$ lbs

$\Sigma F_x = 0$

$0 = -BC + 1500(\cos 60) - FE \cos 33.69$

$0 = -2686.12 + 750 - FE(0.832)$

$FE = 2338.09$ N (C)



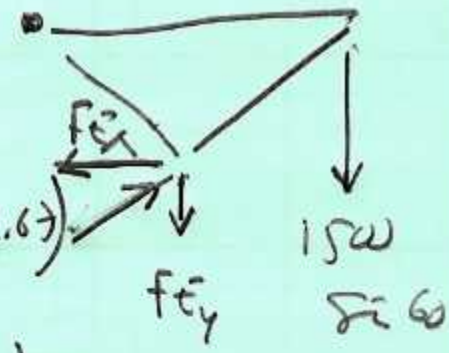
$$\leq M_E = \emptyset \quad (lb \cdot ft)$$

$$\emptyset = {}^{+}BC(2.67) + {}^{-}(750)(2.67)$$

$$+ {}^{-}(1295 \times 4)$$

$$BC = \underline{2696.07\ lb}_{ANS} \quad (T)$$

$\Sigma M_B = \emptyset$



$\emptyset = {}^{-}(FE \cos 33.69)(2.67)$

$+ {}^{-}(FE \sin 33.69)(4)$

$+ {}^{-}(1500 \sin 60)(8)$

$\emptyset = -FE(4.44) + {}^{-}10392$

$FE = \underline{\underline{-2340.^{54}\ lb}}$ (carr) (c)

$\Sigma f_y = 0$

$\emptyset = -1500 \sin 60 + BE \sin 33.69$

$+ FE(\sin 33.69)$

$= -1299 + BE \sin 33.69 + 1298.30$

$BE \approx \underline{\underline{0}}$ Ans