



$$\begin{aligned}\sum M_B^{\circ} &= (20.5625'' * 500\#) + (4.02209'' * 850\#) - (FA * \cos 13.4826'') * (7.43054'') - ((FA * \sin 13.4826'') * (0.573800'')) = 0 \\ 13700.0''\# &- ((FA * \cos 13.4826'') * (7.43054'')) - ((FA * \sin 13.4826'') * (0.573800'')) = 0 \\ 13700.0''\# &- (FA * 7.22576) - (FA * 0.134614) = 0\end{aligned}$$

$$\begin{aligned}13700.0''\# &= FA * 7.22576 + FA * 0.134614 \\ 13700.0''\# &= FA * 7.34268 = 0\end{aligned}$$

$$\frac{13700.0''\#}{7.36037} = \frac{FA * 7.36037}{7.36037}$$

$$1861.32\# = FA$$

$$\begin{aligned}FA_x &= 1861.32 * \cos 13.4826'' \\ FA_y &= 1861.32 * \sin 13.4826''\end{aligned}$$

$$\sum F_x^{\rightarrow} = -850\# - (1861.32\# * \cos 13.4826'') + FB_x = 0$$

$$\frac{-2660.02\# + FB_x = 0}{-FB_x - FB_x}$$

$$2660.02\# = FB_x$$

$$\sum F_y^{\uparrow} = -500\# - (1861.32\# * \sin 13.4826'') + FB_y = 0$$

$$-933.967 + FB_y = 0$$

$$933.967\# = FB_y$$