



$$\begin{aligned}\Sigma M_B^{\curvearrowright} &= 0 \\ (20.56' * 500\#) + (12.75' * 850\#) - (\cos 51^\circ * 6.25') &= 0 \\ (21117.5'\#) - (\cos 51^\circ * 6.25') &= 0\end{aligned}$$

$$\begin{aligned}(21117.5'\#) - (\cos 51^\circ * 6.25') &= 0 \\ -(\cos 51^\circ * 6.25') - (\cos 51^\circ * 6.25') &\end{aligned}$$

$$\frac{(21117.5'\#)}{(6.25')} = \frac{-(\cos 51^\circ) * (6.25')}{(6.25')}$$

$$\frac{3378.8\#}{-\cos 51^\circ} = \frac{-\cos 51^\circ}{-\cos 51^\circ}$$

$$5369\# = -A$$

$$\begin{aligned}\Sigma F_x^{\rightarrow} &= 0 \\ (-850) + (5369 * \cos 51^\circ) + (F_{Bx}) &= 0 \\ (-850) + (3379) + (F_{Bx}) &= 0 \\ -(F_{Bx}) - (F_{Bx}) & \\ (-850) + (3379) &= -(F_{Bx}) \\ 2529\# &= -(F_{Bx})\end{aligned}$$

$$\begin{aligned}\Sigma F_y^{\uparrow} &= 0 \\ (-500) + (5369 * \sin 51^\circ) + (F_{By}) &= 0 \\ (-500) + (4172) + (F_{By}) &= 0 \\ -(F_{By}) - (F_{By}) & \\ (-850) + (4172) &= -(F_{By}) \\ 3322\# &= -(F_{By})\end{aligned}$$