What are the moments that each of the three tension forces exert about point A (the point where the beams come together)?

\[ M = F \times d \]

For \( T_A \):
\[ M_A = 360 \text{ ft-lbs} \]
\[ M_A = [0, 360, 0] \text{ ft-lbs} \]

For \( T_B \):
\[ M_B = 320 \text{ ft-lbs} \]
\[ M_B = [-320, 0, 0] \text{ ft-lbs} \]

For \( T_C \):
\[ M_C = 200 \text{ ft-lbs} \]
\[ M_C = [200, 0, 0] \text{ ft-lbs} \]