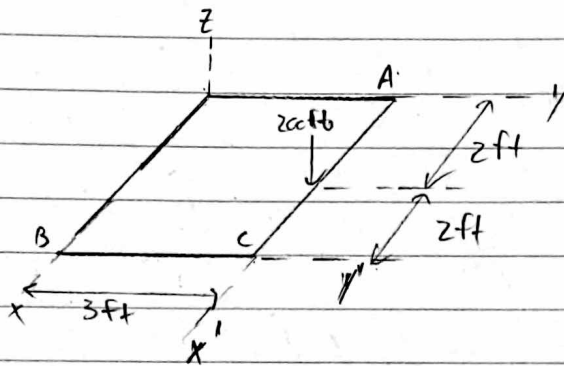


Solutions: 21-S-5.7-MK-01



$$\Sigma F_z = 0 = T_A + T_B + T_C - 200 \text{ lb} - 500 \text{ lb}$$

$$T_A + T_B + T_C = 70016$$

$$\Sigma M_{X'} = (1.5 \text{ ft})(500 \text{ lb}) - T_B (3 \text{ ft})$$

$$T_B = \frac{(50016)(1.5ft)}{(3ft)} \Rightarrow T_B = 25016$$

$$\Sigma M_{y'} = (20016)(244) + (50016)(244) - T_A(444)$$

$$T_A = \frac{(20016)(2ft) + (50016)(2ft)}{4ft} \Rightarrow T_A = 35016$$

$$\sum F_z = 0 = T_A + T_B + T_C - 200lb - 500lb = 0$$

$$T_c = 200\text{ lb} + 500\text{ lb} - 350\text{ lb} - 250\text{ lb}$$

$T_c = 10016$