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Find $M_u$

Step 1: \[ Ac = \frac{As \cdot f_y}{0.85 f'_c} \]
\[ Ac = \frac{2(60)}{0.85(3)} = 47.06 \text{ in}^2 \]

Step 2: Find where $Ac$ lies on shape
\[ 47.06 - 24 = 23.06 \text{ in}^2 \]
\[ \frac{23.06}{16} = 1.44 \]

Step 3: Since shape is not rectangular, do not use \[ \frac{a}{2} \]
but rather find centroid of area
\[ \bar{y} = \frac{\Sigma A d}{\Sigma A} \]
I'll choose top as baseline
d is distance from centroid of shape to baseline
\[ \frac{24(2) + 23.04(3.72)}{24 + 23.04} = 2.84 \text{ in from top} \]

Step 4: \[ z = d - \bar{y} \]
\[ z = 18 - 2.84 = 15.16 \text{ in} \]

Step 5: \[ M_u = \phi A s f_y z \]
\[ = 0.9 \cdot 2(60) \cdot 15.16 = 1637.28 \text{ KIN} \]
\[ = 136.4 \text{ KFT} \]