

$$B_y: \sum M_A = 0 \quad (\text{kip} \cdot \text{ft})$$

$$0 = -(3)(3) - (10)(4) + B_y(12) - 12(14)$$

$$B_y = \frac{259}{12}$$

$$B_y = \underline{\underline{21.58 \text{ kip}}}$$

$A_y:$

$$\Sigma M_B = 0: \quad (\text{kip} \cdot \text{ft})$$

$$0 = + (3)(9) + + (10)(5)$$

$$- (12)(3) - A_y(12)$$

$$A_y = \frac{41}{12}$$

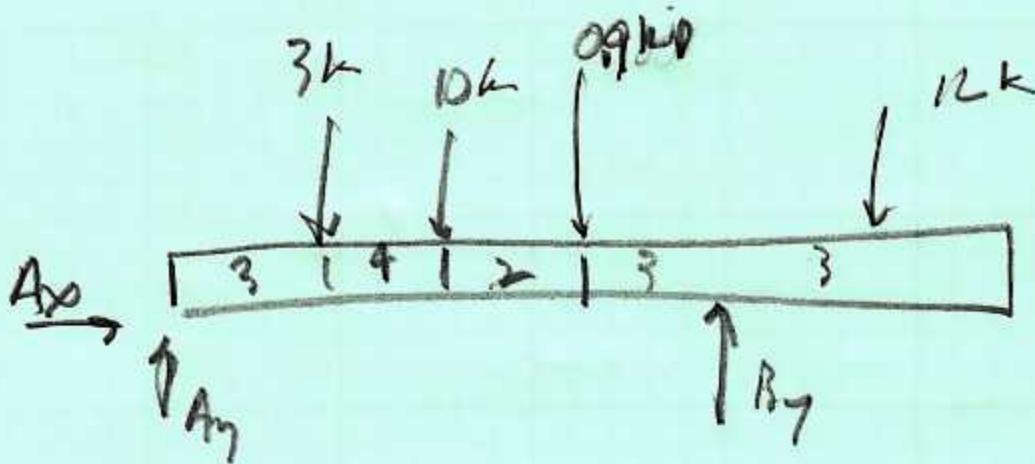
$$A_y = \underline{\underline{3.42}} \text{ kip} \quad \text{Ans}$$

$$A_x = \underline{\underline{0}} \quad (\text{in sb}) \quad \text{Ans}$$

$$\Sigma F_y = 0$$

$$0 = 3.42 - 3 - 10 - 12 + 21.58$$

$$\underline{\underline{0 = 0}} \quad \checkmark \quad \text{Ans}$$



$$B_y: \quad \Sigma M_A = \phi \quad (\text{k} \cdot \text{ft})$$

$$\phi = -3(3) + -10(7) + -(0.9)(9) + B_y(12) - (12)(15)$$

$$B_y = 22.26 \text{ kip}$$

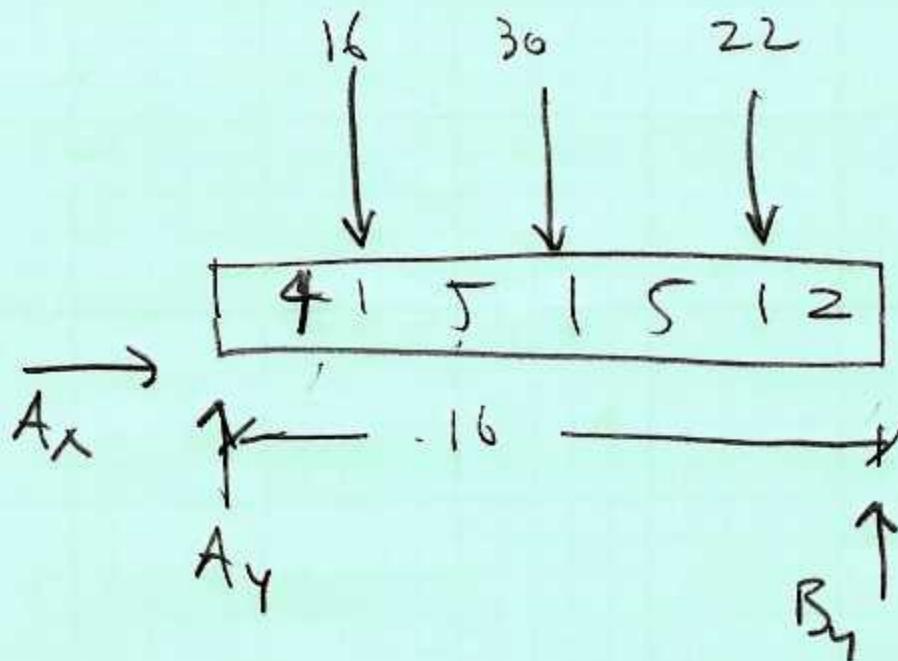
$A_y:$

$$\Sigma M_B = \phi \quad (\text{k} \cdot \text{ft})$$

$$\phi = +3(9) + (10)(5) + (0.9)(3)$$

$$A_y = 243.7/12 - (14)(3) - A_y(12)$$

$$A_y = 3.64 \text{ kip}$$



B_y :

$$\sum M_A = 0 \quad (\text{kip} \cdot \text{ft})$$

$$0 = -(16)(4) + -(30)(9)$$

$$+ -(22)(14) + B_y(16)$$

$$B_y = 40.13 \text{ kips}$$

ANS

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$$\sum F_y: \sum M_B = 0$$

$$\begin{aligned} 0 = & -(A_y)(16) + (16)(12) \\ & + (30)(7) + (22)(2) \end{aligned}$$

$$A_y = \underline{\underline{27.88 \text{ kips}}}$$

ANS

$$\sum F_y = 0 ?$$

$$0 = +40.13 - 16 - 30 - 22 + 27.88$$

$$0 \approx 0 \quad \checkmark$$