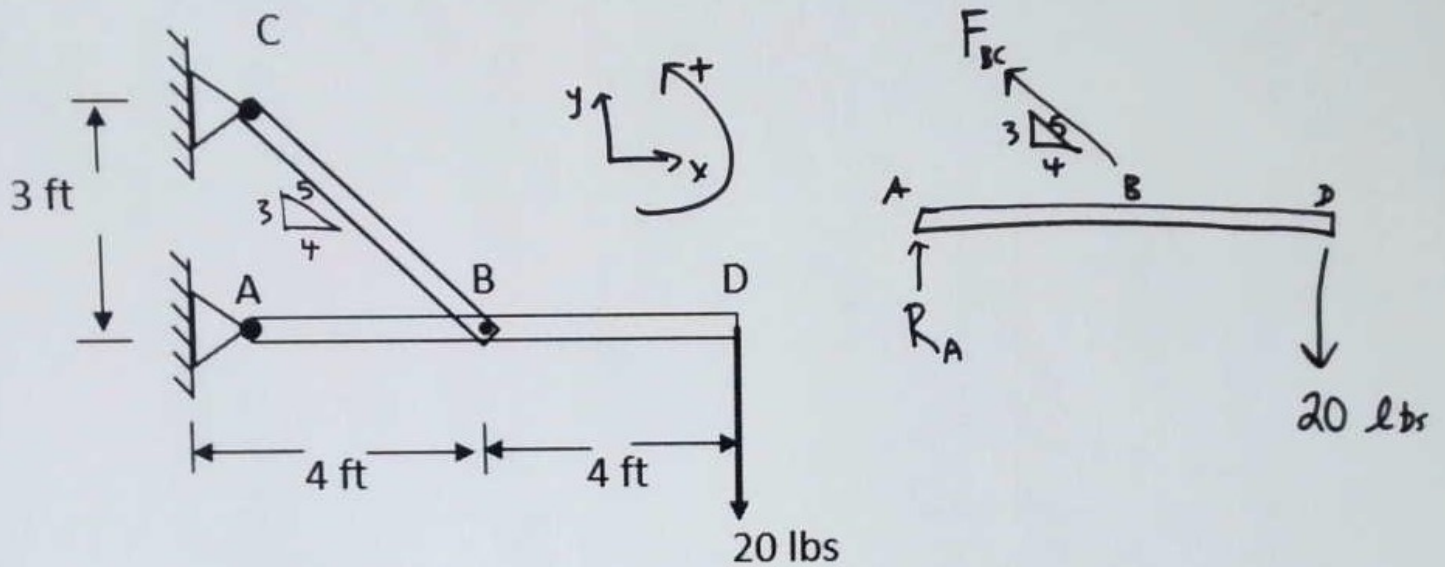


Calculate the reaction force F_{BC} in the diagram below. Neglect the weight of members BC and AD.



$$\sum M_A = 0 = (-20 \text{ lbs})(8 \text{ ft}) + (F_{BC})\left(\frac{3}{5}\right)(4 \text{ ft})$$

$$160 \text{ ft}\cdot\text{lbs} = F_{BC} (2.4 \text{ ft})$$

$$F_{BC} = 66.67 \text{ lbs}$$

round to
67 for exams