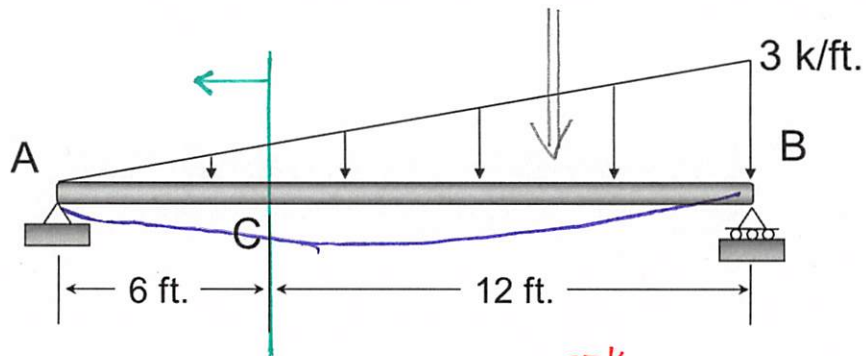
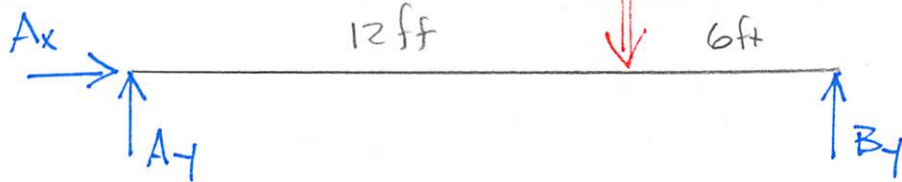


Example 4a-3 - Determine the internal shear and moment at a section passing through point C.

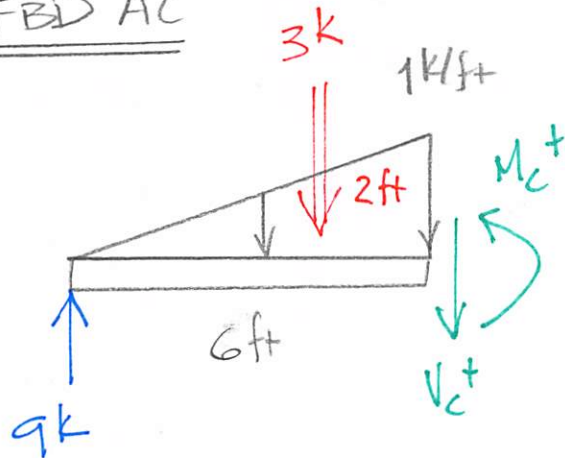


$$\text{SLOPE } \frac{3 \text{ k/ft}}{18 \text{ ft}} = \frac{1}{6}$$

$$\sum M_B = 0 = 27 \text{ k}(6 \text{ ft}) - A_y(18 \text{ ft}) \quad \underline{A_y = 9 \text{ k}}$$



FBD AC



$$\sum M_{cut} = 0 = M_c + 3 \text{ k}(2 \text{ ft}) - 9 \text{ k}(6 \text{ ft})$$

$$\underline{M_c = 48 \text{ kft}}$$

$$\sum F_y = 0 = -V_c - 3 \text{ k} + 9 \text{ k}$$

$$\underline{V_c = 6 \text{ k}}$$

$$F = \frac{1}{2}(6 \text{ ft}) 1 \text{ k/ft}$$