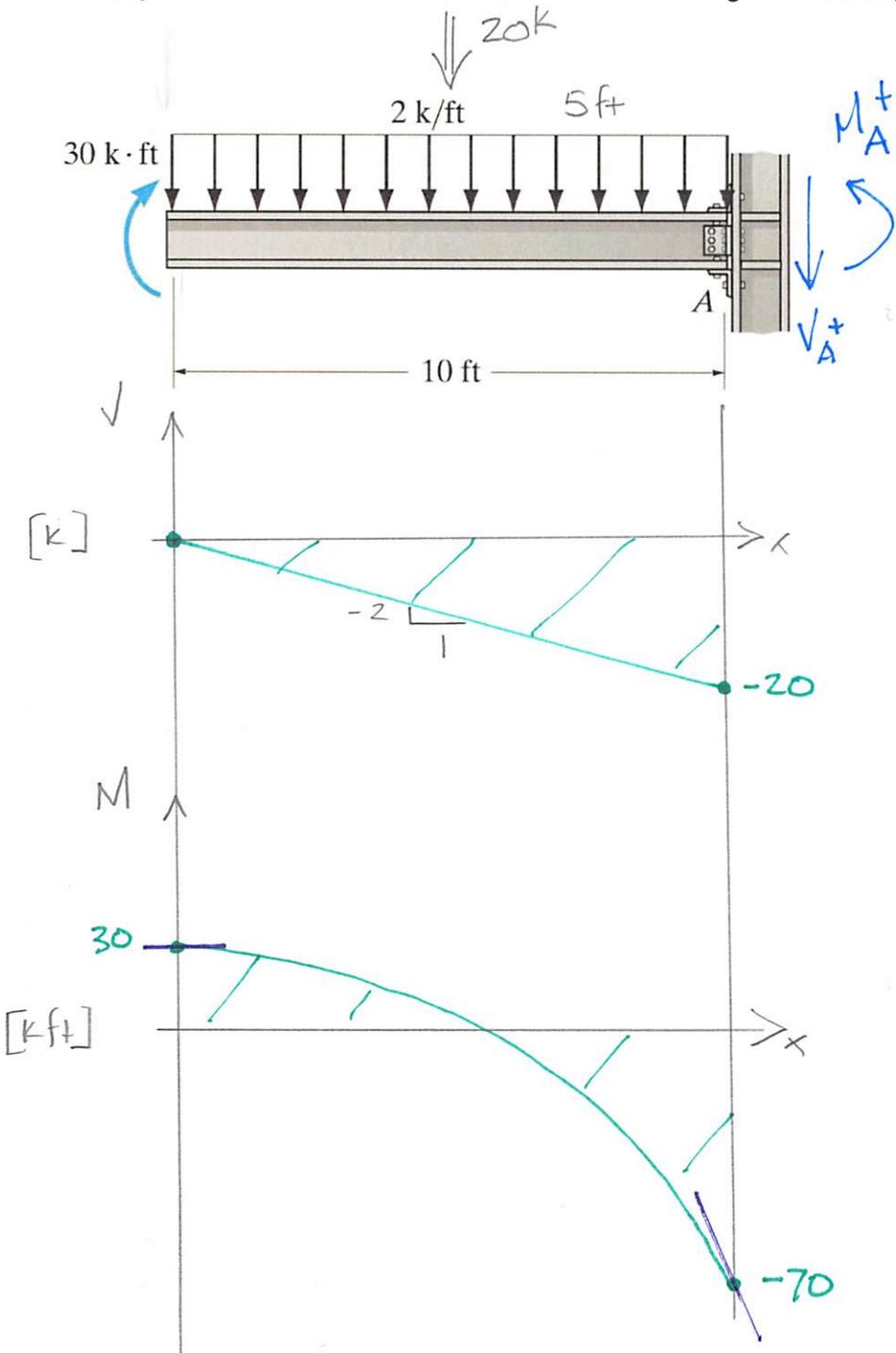


Example 4c-4 – Construct the shear force and bending moment diagrams.

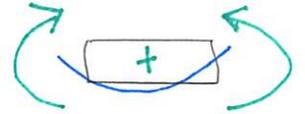


$$\sum M_A = 0 = M_A + 20^k(5\text{ft}) - 30\text{k}\cdot\text{ft}$$

$$M_A = -70\text{k}\cdot\text{ft}$$

$$\sum F_y = 0 = -V_A - 20^k$$

$$V_A = -20^k$$



$$\Delta V = \int w dx \quad \frac{dV}{dx} = w$$

$$\Delta M = \int V dx \quad \frac{dM}{dx} = V$$

$$M_{\text{MAX}} = -70\text{k}\cdot\text{ft} @ A$$