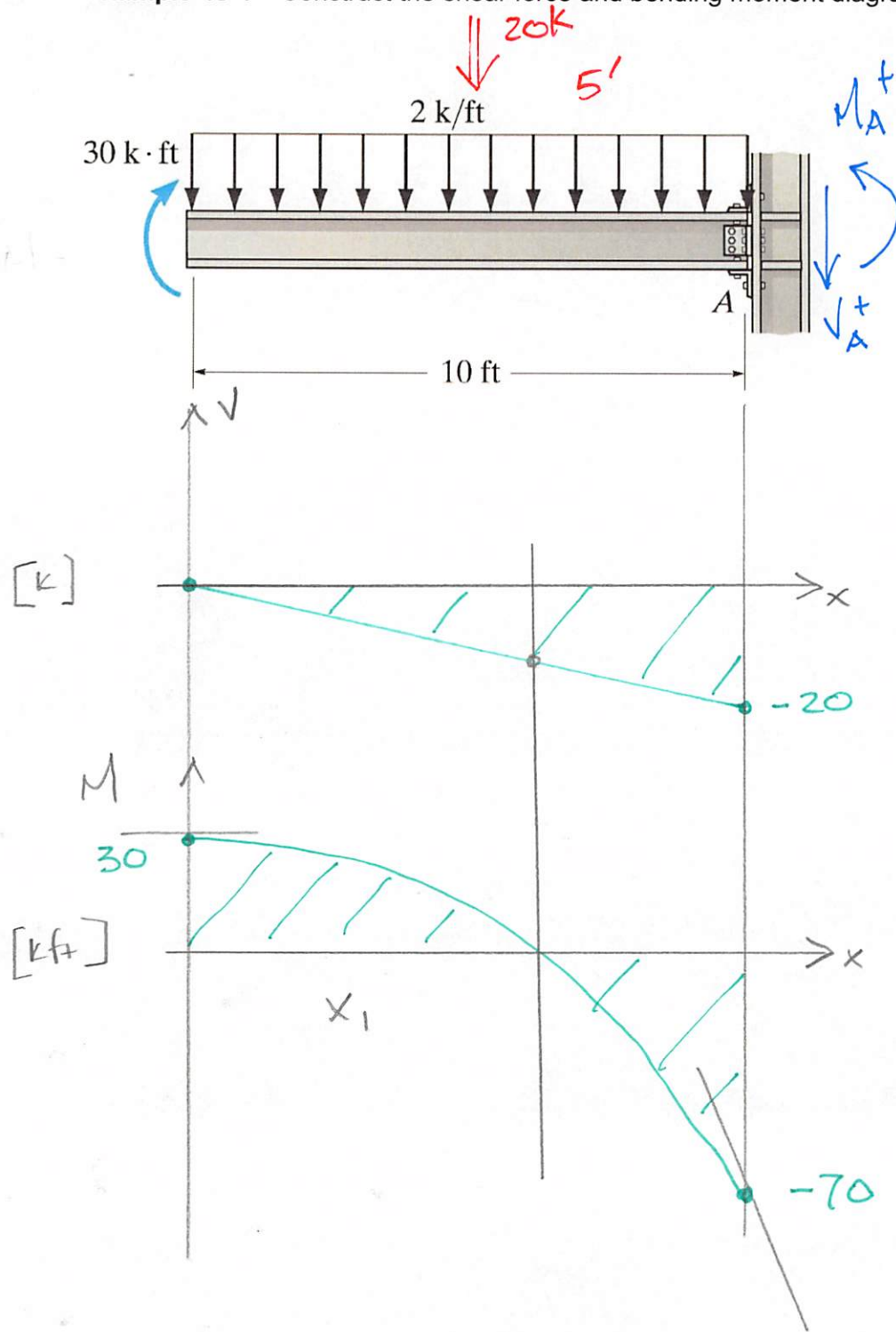


Example 4c-4 – Construct the shear force and bending moment diagrams.



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

$$\underline{M_A = -70 \text{ kft}}$$

$$+\uparrow \sum F_y = 0 = -V_A - 20^k \quad \underline{V_A = -20^k}$$

$$M_{\text{FREE END}} = 30 \text{ kft}$$

$$\underline{V_{\text{FREE END}} = 0}$$

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

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