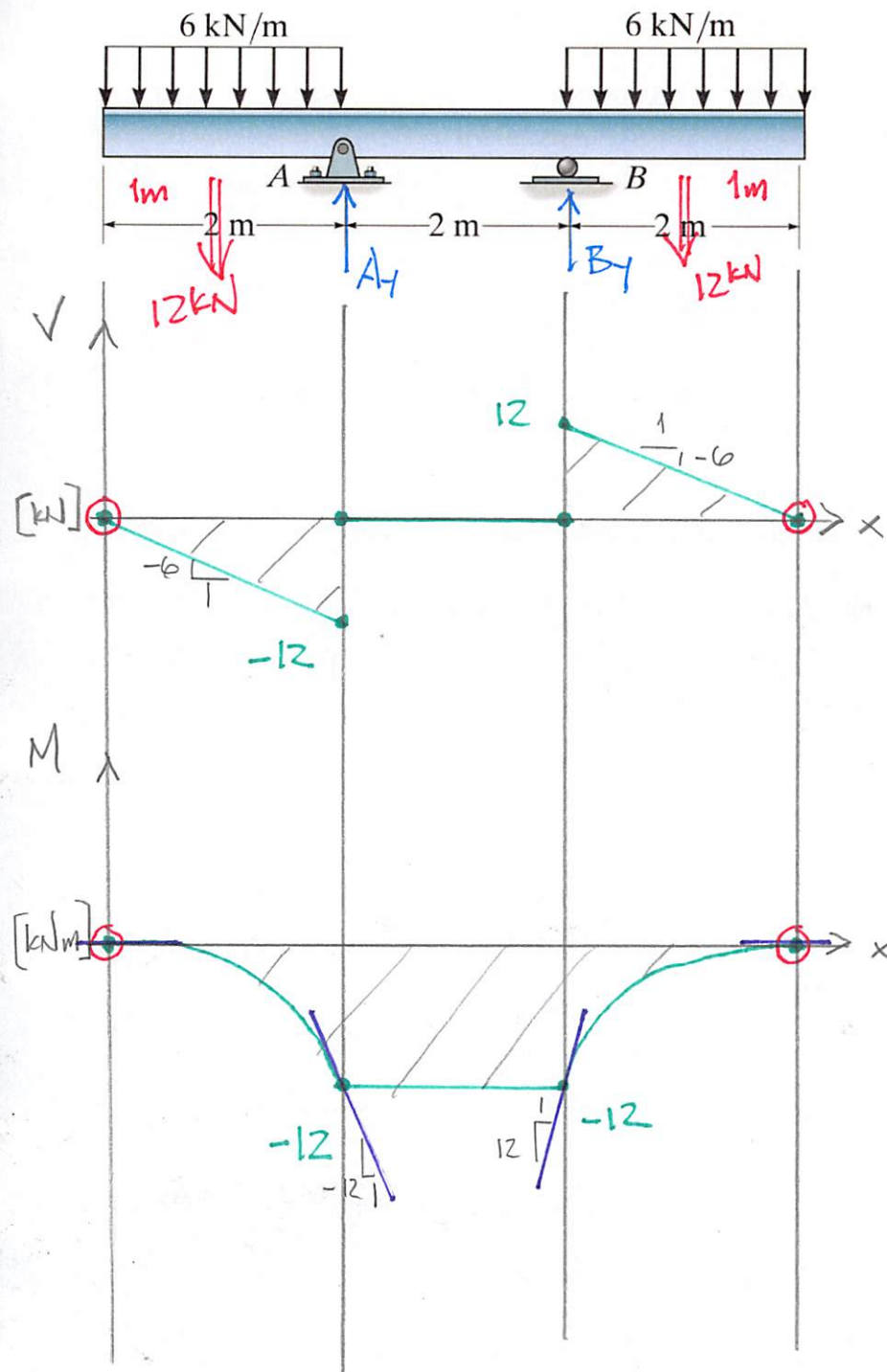


Example 4c-6 – Construct the shear force and bending moment diagrams.



$$\sum M_B = 0 = -12\text{ kN}(1\text{ m}) + 12\text{ kN}(3\text{ m}) - A_y(2\text{ m})$$

$$A_y = 12\text{ kN}$$

$$+\uparrow \sum F_y = 0 = A_y + B_y - 12\text{ kN} - 12\text{ kN}$$

$$B_y = 12\text{ kN}$$

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

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

$$\underline{\underline{M_{\text{MAX}} = -12\text{ kNm} \quad 2 \leq x \leq 4\text{ m}}}$$