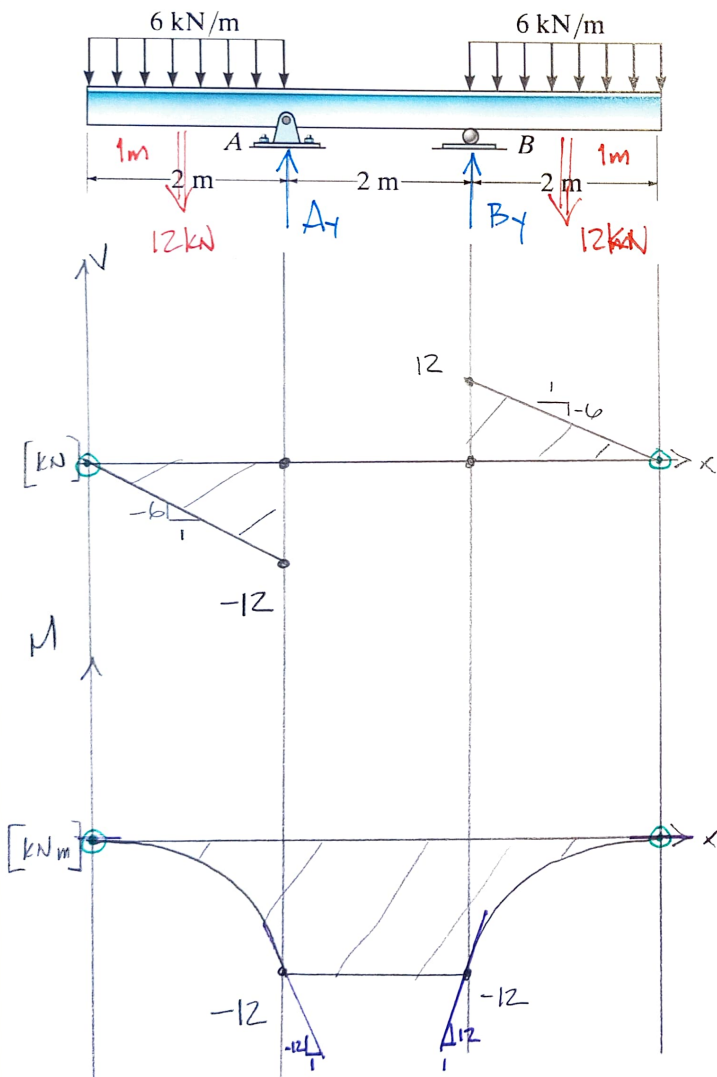


Example 4c-6 – Construct the shear force and bending moment diagrams.



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

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

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

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

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

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

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