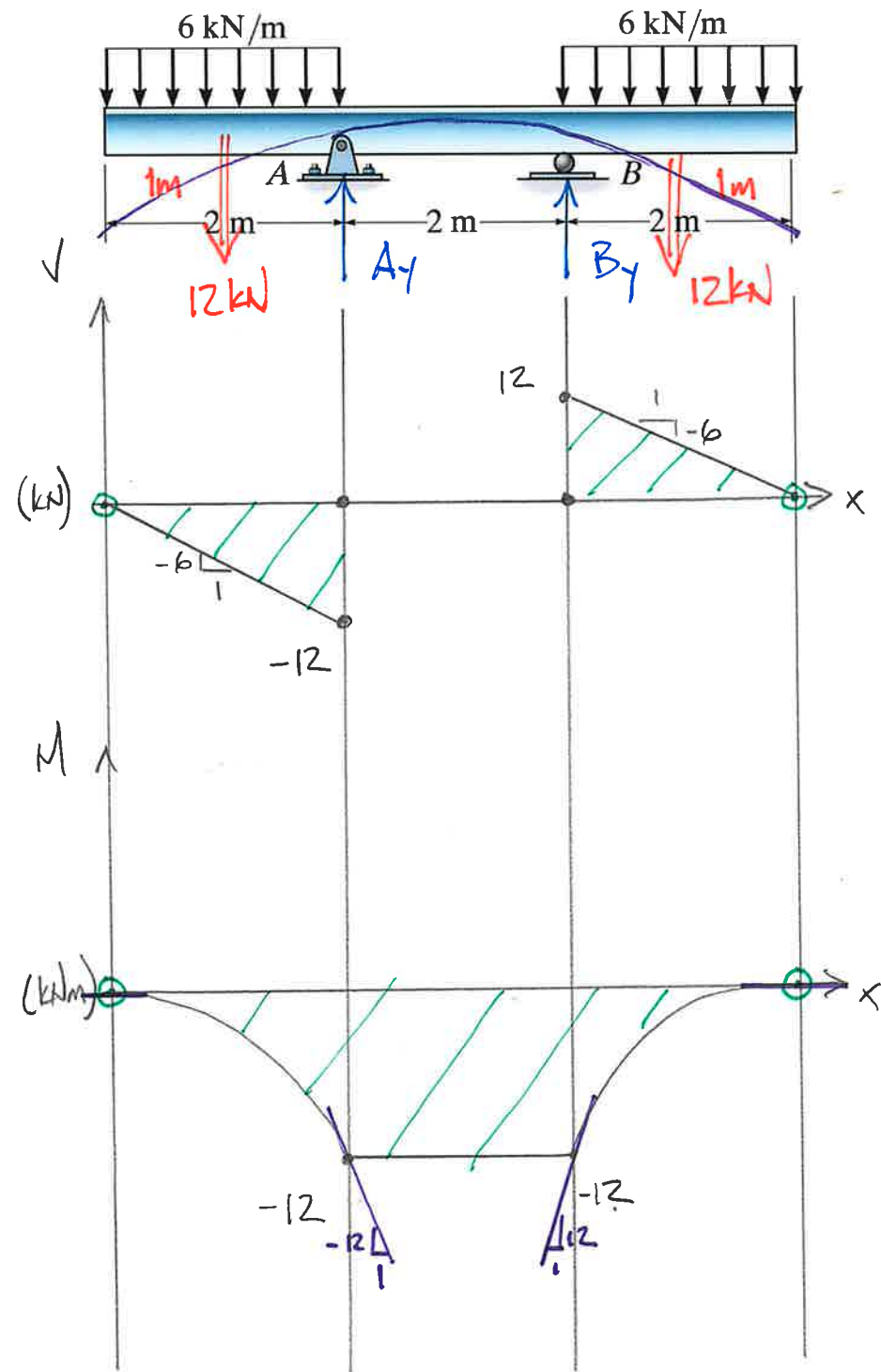


Example 4c-6 – Construct the shear force and bending moment diagrams.



$$\sum \overset{\curvearrowright}{M}_B = 0 = -12\text{kN}(1\text{m}) + 12\text{kN}(3\text{m}) - A_y(2\text{m})$$

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

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

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

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

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