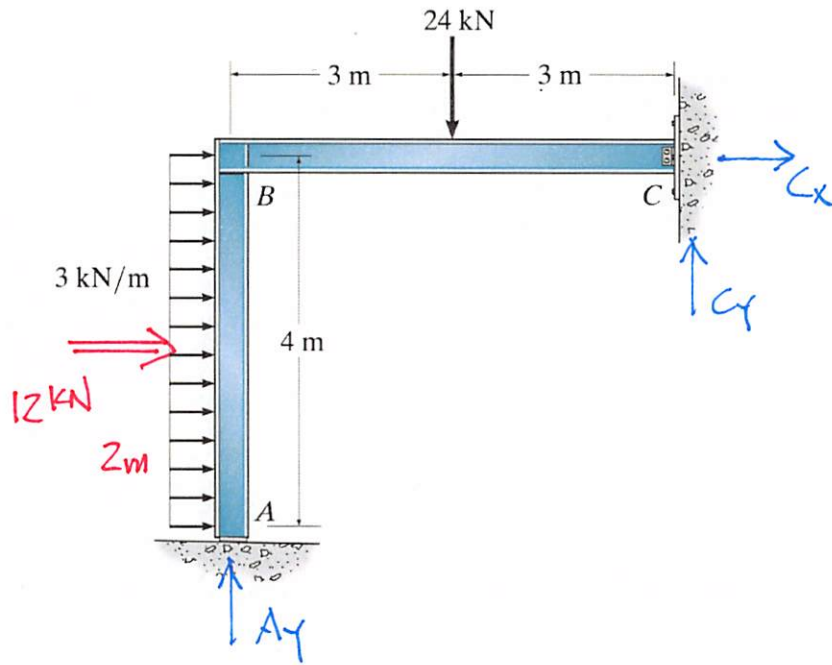


Example 4d-3: Draw the shear and moment diagrams for the following frame:

1/2



$$\sum M_C = 0 = 24 \text{ kN}(3 \text{ m}) + 12 \text{ kN}(2 \text{ m}) - A_y(6 \text{ m})$$

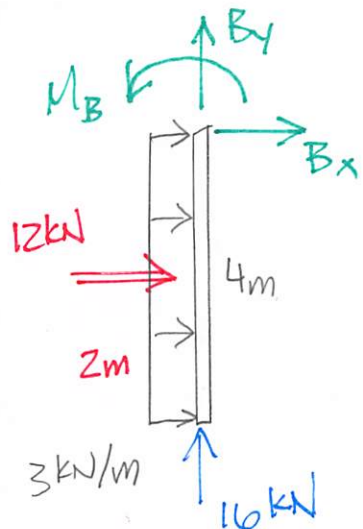
$$\underline{A_y = 16 \text{ kN}}$$

$$\sum F_y = 0 = A_y + C_y - 24 \text{ kN}$$

$$\underline{C_y = 8 \text{ kN}}$$

$$\sum F_x = 0 = C_x + 12 \text{ kN} \quad \underline{C_x = -12 \text{ kN}}$$

SECTION AB



$$\sum M_B = 0 = M_B + 12 \text{ kN}(2 \text{ m}) \quad \underline{M_B = -24 \text{ kNm}}$$

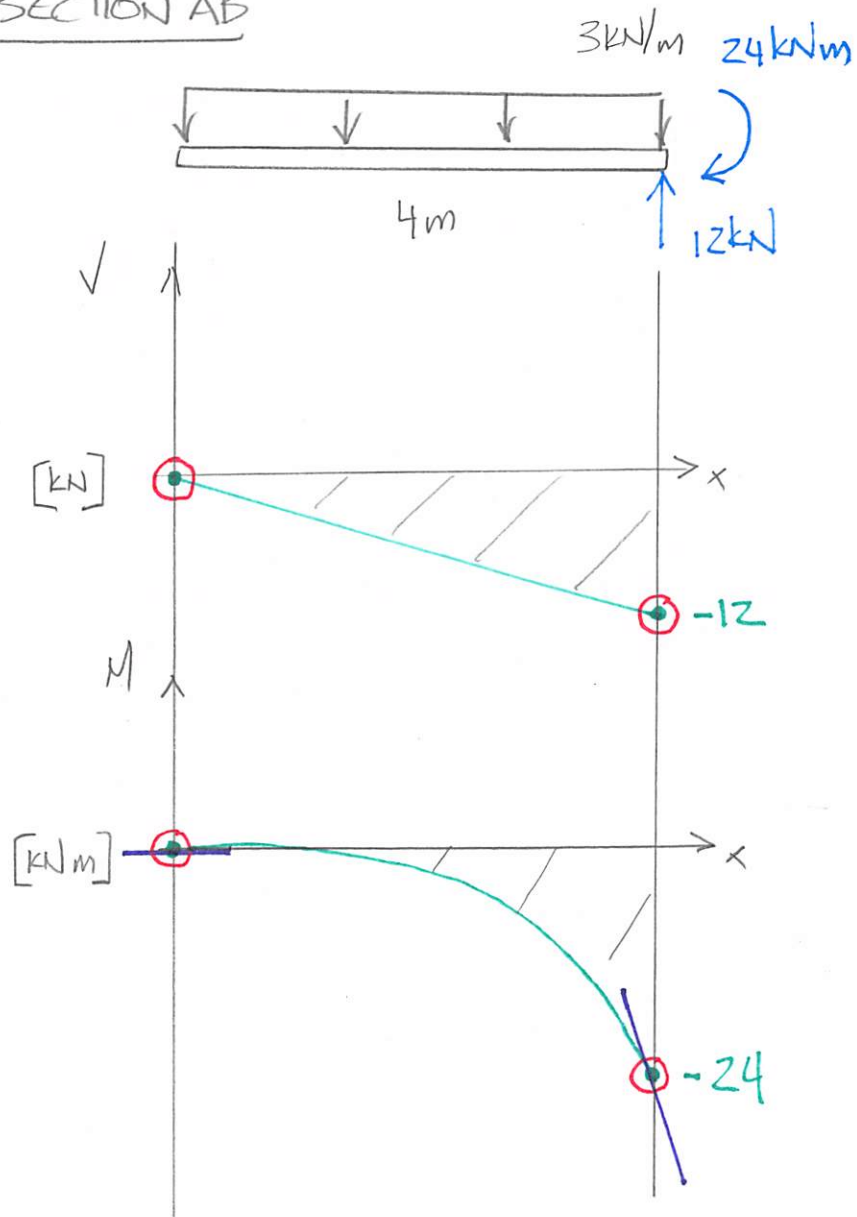
$$\sum F_y = 0 = B_y + 16 \text{ kN} \quad \underline{B_y = -16 \text{ kN}}$$

$$\sum F_x = 0 = B_x + 12 \text{ kN} \quad \underline{B_x = -12 \text{ kN}}$$

Example 4d-3: Draw the shear and moment diagrams for the following frame:

2/2

SECTION AB



SECTION BC

