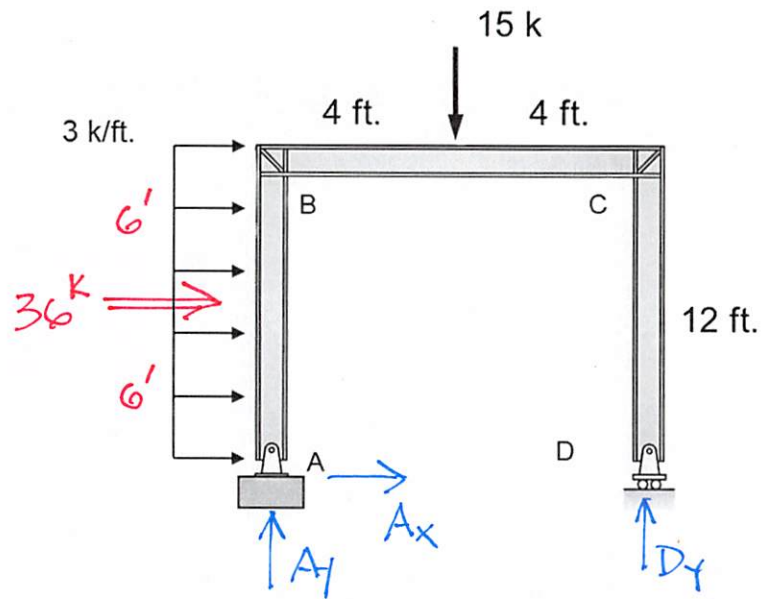


Example 4d-1: Draw the shear and moment diagrams for the following frame:

1/2



$$\sum M_A = 0 = -36^k(6') - 15^k(4') + D_y(8')$$

$$\underline{D_y = 34.5^k}$$

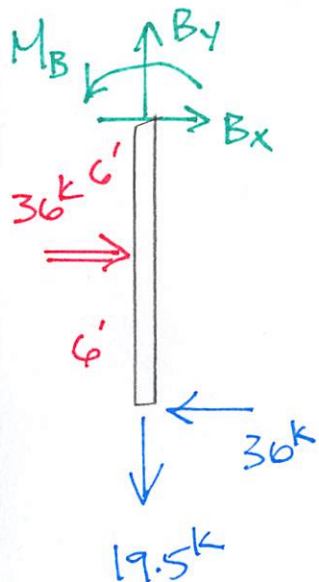
$$\sum F_y = 0 = A_y + D_y - 15^k$$

$$\underline{A_y = -19.5^k}$$

$$\sum F_x = 0 = A_x + 36^k$$

$$\underline{A_x = -36^k}$$

SECTION AB



$$\sum M_B = 0 = M_B + 36^k(6') - 36^k(12')$$

$$\underline{M_B = 216^k \text{ ft}}$$

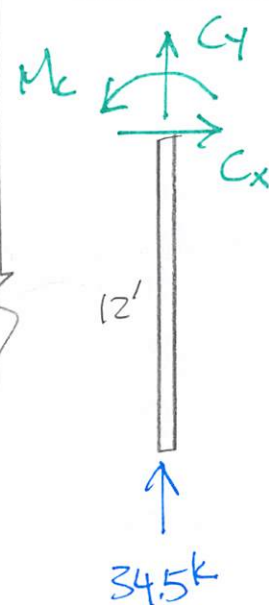
$$\sum F_y = 0 = B_y - 19.5^k$$

$$\underline{B_y = 19.5^k}$$

$$\sum F_x = 0 = B_x + 36^k - 36^k$$

$$\underline{B_x = 0}$$

SECTION CD



$$\sum M_C = 0 = M_C$$

$$\sum F_y = 0 = C_y + 34.5^k$$

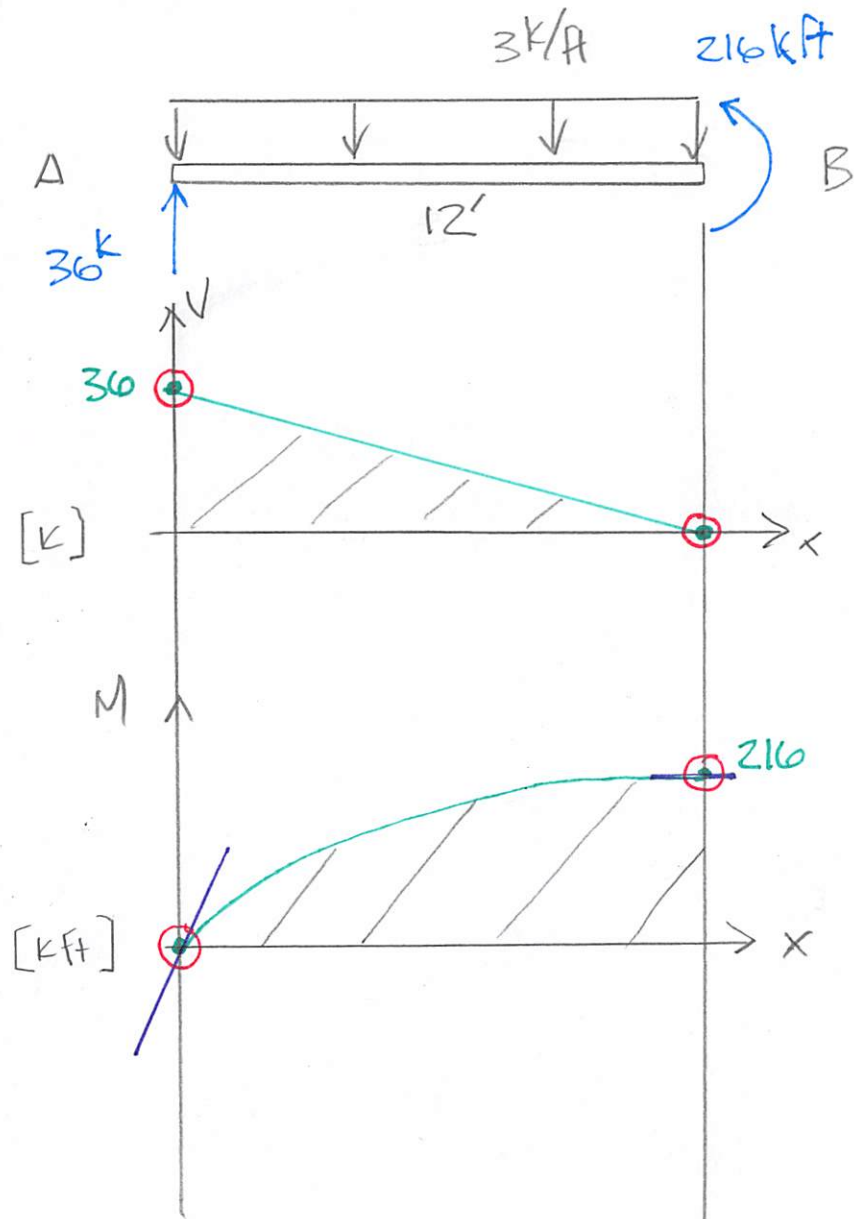
$$\underline{C_y = -34.5^k}$$

$$\sum F_x = 0 = C_x$$

Example 4d-1: Draw the shear and moment diagrams for the following frame:

2/2

SECTION AB



SECTION BC

