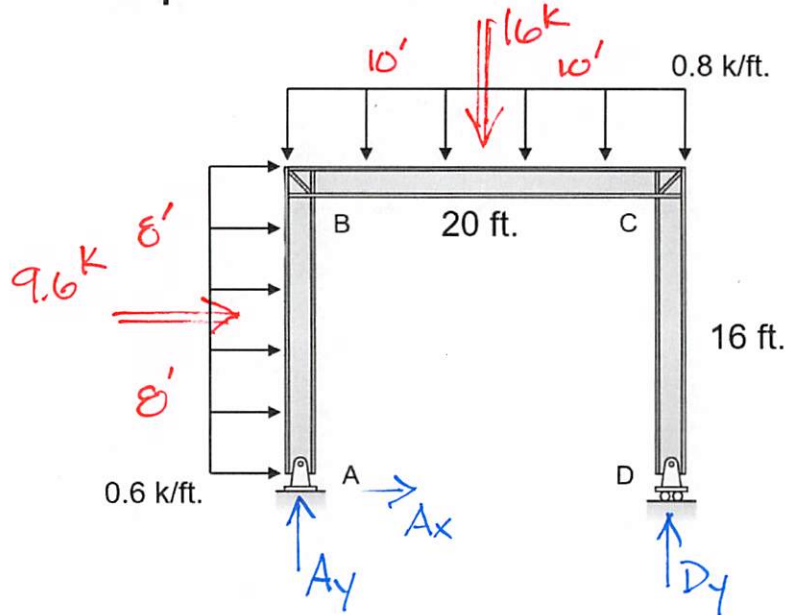


**Example 4d-0:** Draw the shear and moment diagrams for the following frame:

1/2



$$\sum M_A = 0 = -9.6^k(8') - 16^k(10') + D_y(20')$$

$$D_y = 11.84^k$$

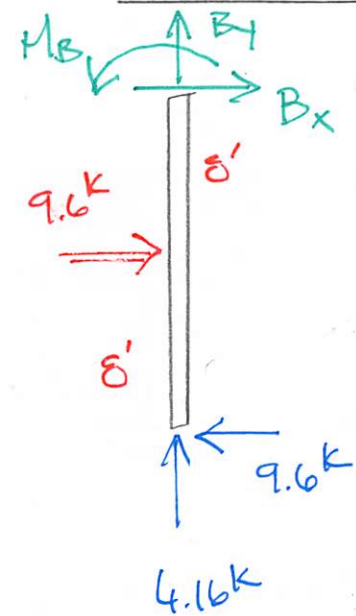
$$\sum F_y = 0 = A_y + D_y - 16^k$$

$$A_y = 4.16^k$$

$$\sum F_x = 0 = A_x + 9.6^k$$

$$A_x = -9.6^k$$

SECTION AB



$$\sum M_B = 0$$

$$= M_B + 9.6^k(8') - 9.6^k(16')$$

$$M_B = 76.8^k \text{ ft}$$

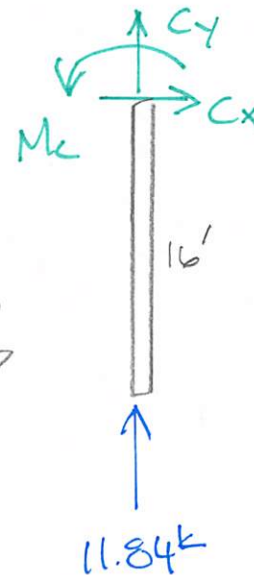
$$\sum F_y = 0 = 4.16^k + B_y$$

$$B_y = -4.16^k$$

$$\sum F_x = 0 = 9.6^k - 9.6^k + B_x$$

$$B_x = 0$$

SECTION CD



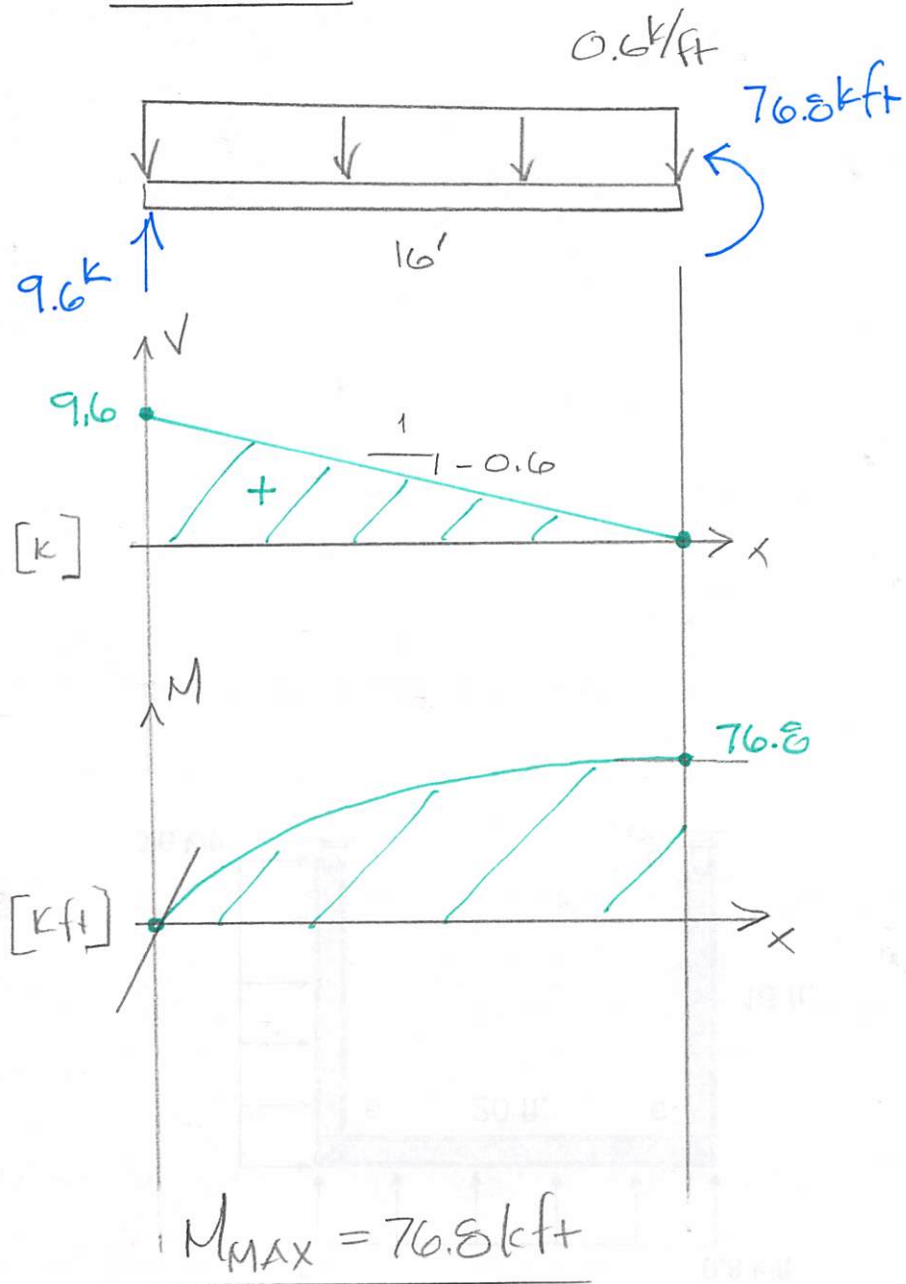
$$\sum M_C = 0 = M_C$$

$$\sum F_y = 0 = 11.84^k + C_y$$

$$C_y = -11.84^k$$

$$\sum F_x = 0 = C_x$$

## SECTION AB



## SECTION BC

