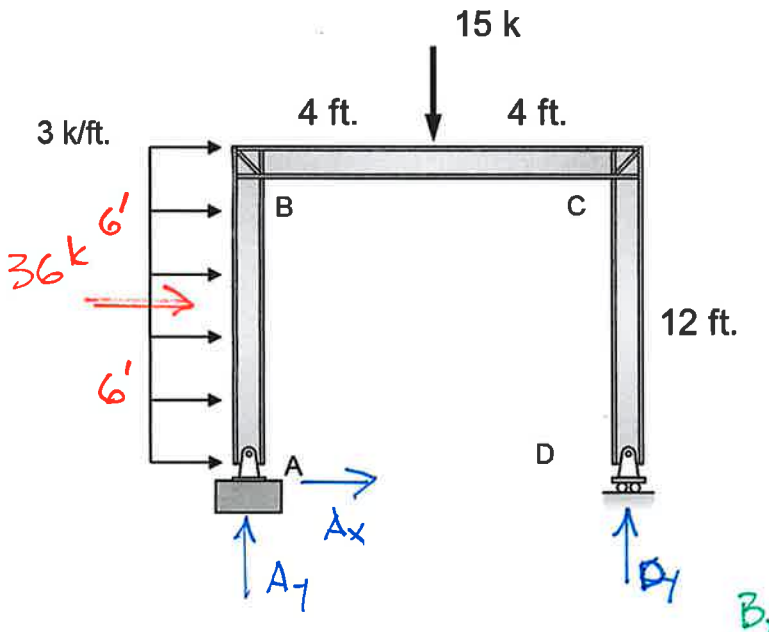
Example 4d-1: Draw the shear and moment diagrams for the following frame:

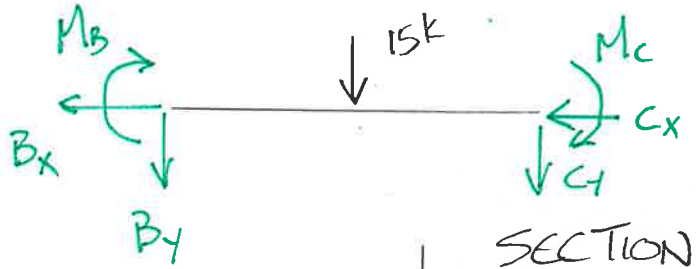


$\circlearrowleft +\Sigma M_A = 0 = -36^k(6') - 15^k(4') + D_y(8')$

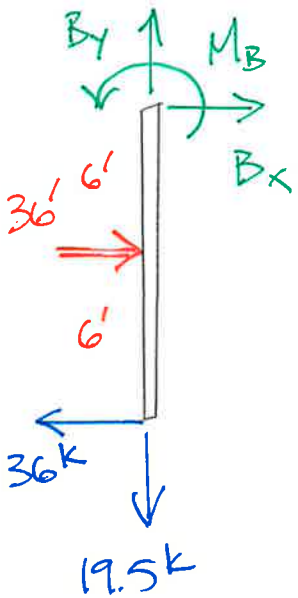
$D_y = 34.5^k$

$+\uparrow \Sigma F_y = 0 = A_y + D_y - 15^k$ $\quad A_y = -19.5^k$

$\pm\rightarrow \Sigma F_x = 0 = A_x + 36^k$ $\quad A_x = -36^k$



SECTION AB



$\circlearrowleft +\Sigma M_B = 0$

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

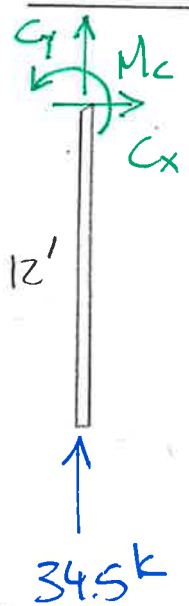
$M_B = 216^k ft$

$+\uparrow \Sigma F_y = 0 = B_y - 19.5^k$ $\quad B_y = 19.5^k$

$\pm\rightarrow \Sigma F_x = 0 = B_x + 36^k - 36^k$

$B_x = 0$

SECTION CD



$\circlearrowleft +\Sigma M_C = 0 = M_C$

$+\uparrow \Sigma F_y = 0 = C_y + 34.5^k$

$C_y = -34.5^k$

$\pm\rightarrow \Sigma F_x = 0 = C_x$

Example 4d-1: Draw the shear and moment diagrams for the following frame: **2/2**