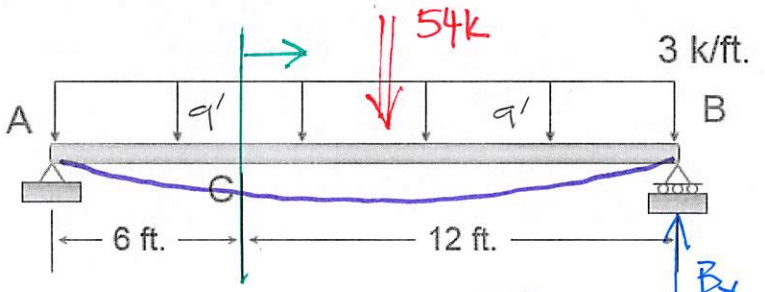
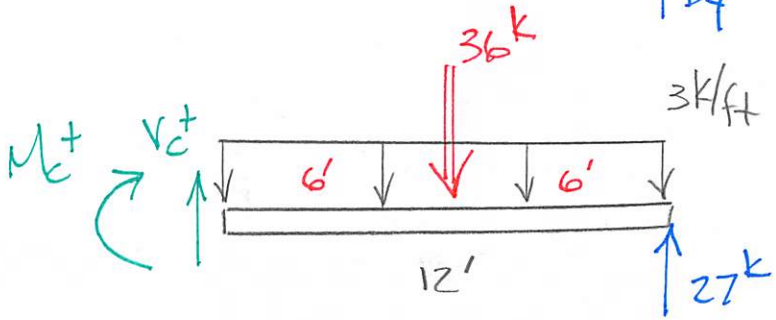
Example 4a-2 - Determine the internal shear and moment at a section passing through point C.



$$\circlearrowleft +\Sigma M_A = 0 = -54k(9') + B_y(18') \qquad B_y = 27^k$$

$$+\uparrow \Sigma F_y = 0 = A_y + B_y - 54k \qquad A_y = 27^k$$

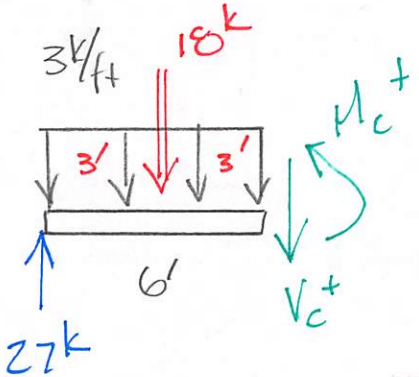


$$\circlearrowleft +\Sigma M_{CUT} = 0 = -M_c - 36^k(6') + 27^k(12')$$

$$M_c = 108\,k\,ft$$

$$+\uparrow \Sigma F_y = 0 = V_c - 36^k + 27^k$$

$$V_c = 9^k$$



$$\circlearrowleft +\Sigma M_{CUT} = 0 = M_c + 18^k(3') - 27^k(6')$$

$$M_c = 108\,k\,ft$$

$$+\uparrow \Sigma F_y = 0 = V_c - 18^k + 27^k$$

$$V_c = 9^k$$