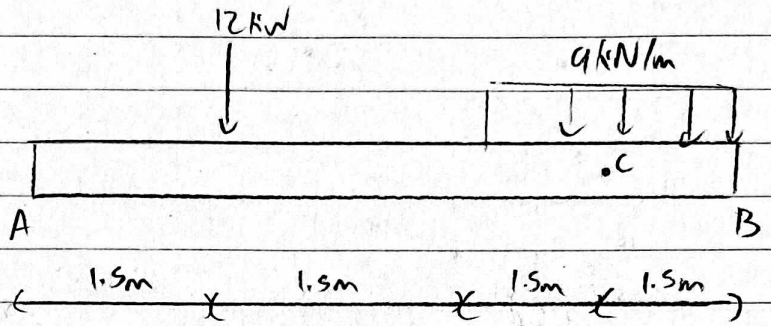
Solutions: 21-6-7.1-MK-02



force = $(9\,kN/m)(3m) = 27\,N$

$\Sigma M_B = -A_y(6m) + (12\,kN)(4.5m) + (27\,kN)(1.5m)$

$A_y = \dfrac{(27\,kN)(1.5m) + (12\,kN)(4.5m)}{6m} \Rightarrow \boxed{A_y = 15.75\ kN}$

$N_C = 0$

$\Sigma F_y = 0: \quad 15.75 - 12 - (9\,kN/m)(1.5m) + V_C$

$V_C = (9\,kN/m)(1.5m) + 12\,kN - 15.75\,kN \rightarrow \boxed{V_C = 9.75\ kN}$

$\Sigma M = 0: \quad -(15.75)(4.5) + (12)(3) + (9)(1.5)(0.75) - M_C$

$\boxed{M_C = 24.75\ kNm}$