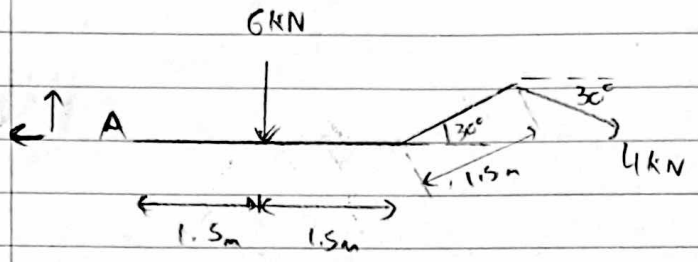
Solutions: 21-S-5.4-MK-03



$\Sigma f_x = 0$ $\quad 4\cos 30^\circ - A_x$

$A_x = 4\cos 30^\circ = 3.46\,kN$ $\quad$ $A_x = 3.46\,kN$

$\Sigma F_y = 0$ $\quad A_y - 6 - 4\sin 30^\circ$

$A_y = 6 + 4\sin 30^\circ$ $\quad$ $A_y = 8\,KN$

$\circlearrowleft \Sigma M_A = 0 = M_A - (6kN)(1.5m) - (4\cos 30)(1.5\sin 30) - (4\sin 30)(1.5\cos 30 + 3)$

$M_A = (6kN)(1.5m) + (4\cos 30)(1.5\sin 30) + (4\sin 30)(1.5\cos 30 + 3)$

$M_A = 20.196\ KNm$