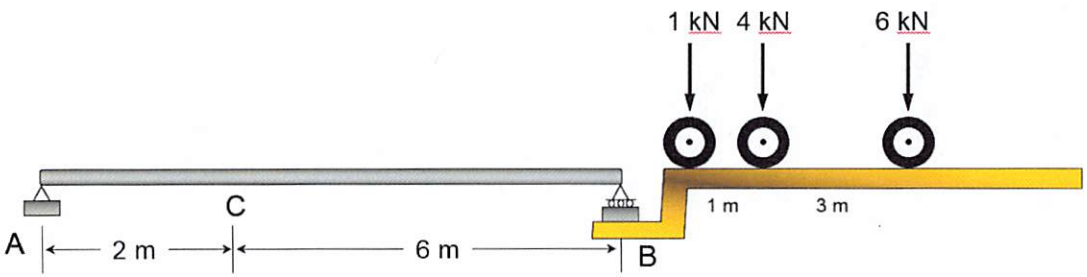
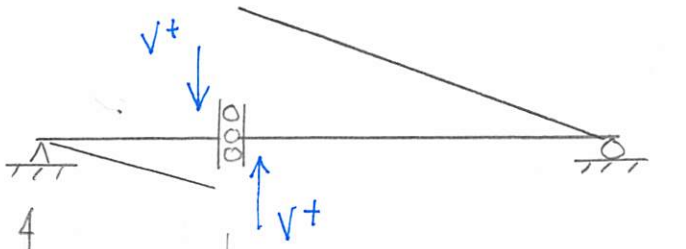
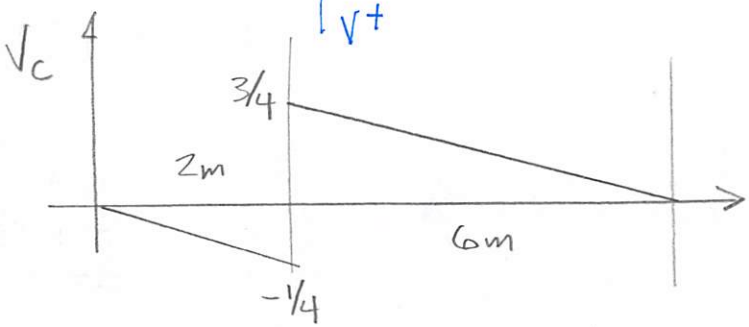
Example 6c-2: Determine the maximum shear created at point C in the beam below due to the wheel loads of a moving truck traveling from right to left.

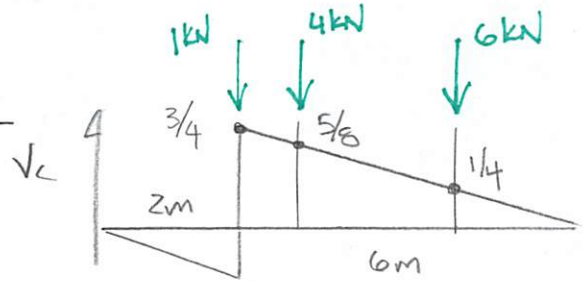






$V_{C_{MAX}} = 5.125\,kN$

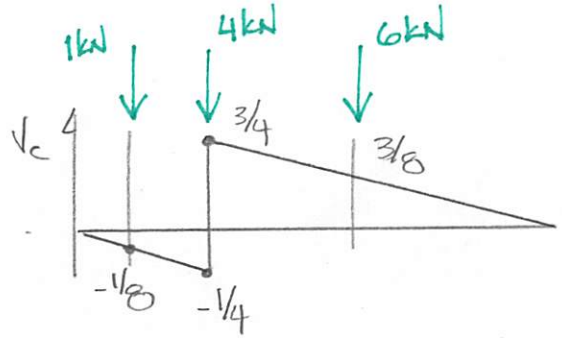
CASE 1



$\text{SLOPE} = \frac{3/4}{6} = \frac{1}{8}$

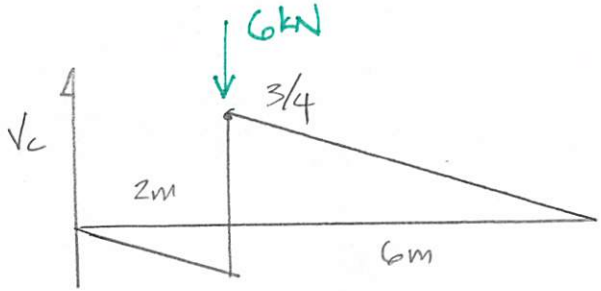
$V_{C_1} = 1\,kN(3/4) + 4\,kN(5/8) + 6\,kN(1/4) = 4.75\,kN$

CASE 2



$V_{C_2} = 1\,kN(-1/8) + 4\,kN(3/4) + 6\,kN(3/8) = 5.125\,kN$

CASE 3



$V_{C_3} = 6\,kN(3/4) = 4.5\,kN$