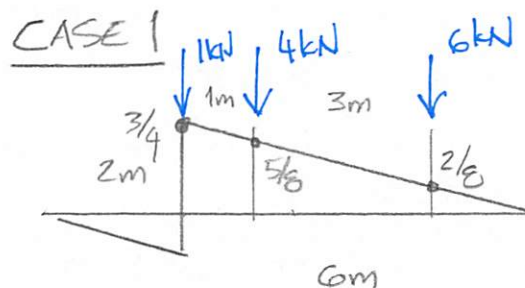
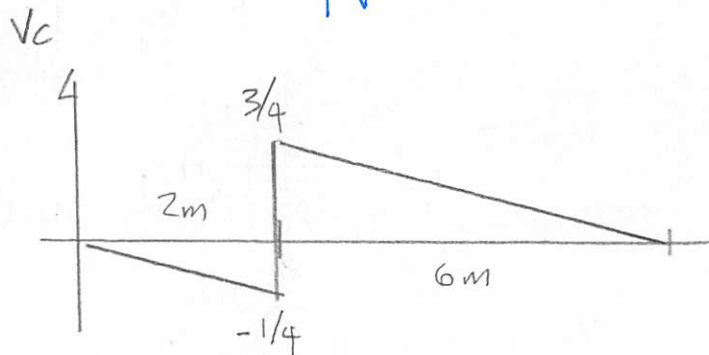
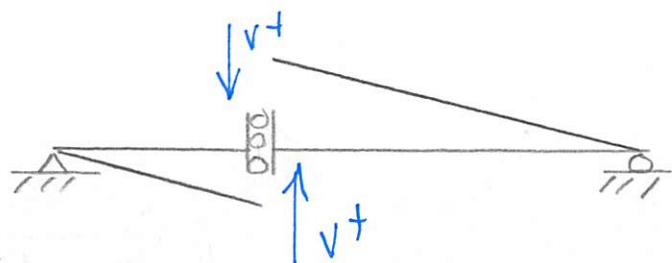
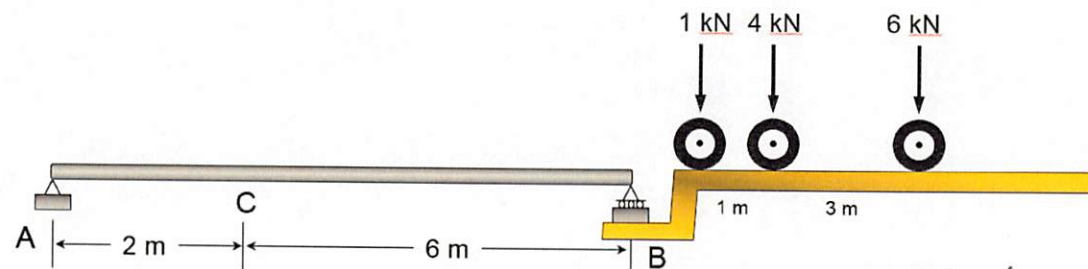
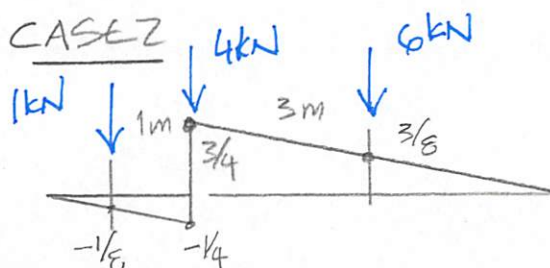


Example 6c-2: Determine the maximum shear created at point C in the beam below due to the wheel loads of a moving truck traveling from right to left.

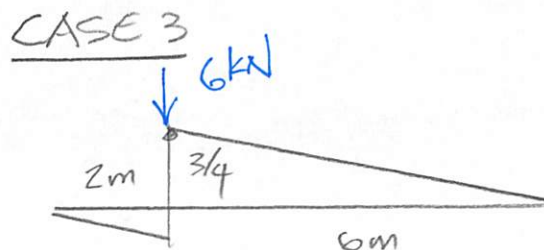


$$\text{SLOPE} = \frac{3/4}{6} = \frac{3}{24} = \frac{1}{8}$$

$$V_C = 1\text{ kN}\left(\frac{3}{4}\right) + 4\text{ kN}\left(\frac{5}{8}\right) + 6\text{ kN}\left(\frac{2}{8}\right) = 4.75\text{ kN}$$



$$V_C = 1\text{ kN}\left(-\frac{1}{8}\right) + 4\text{ kN}\left(\frac{3}{4}\right) + 6\text{ kN}\left(\frac{3}{8}\right) = 5.125\text{ kN}$$



$$V_C = 6\text{ kN}\left(\frac{3}{4}\right) = 4.5\text{ kN}$$

$$\underline{\underline{V_{C_{MAX}} = 5.125\text{ kN}}}$$