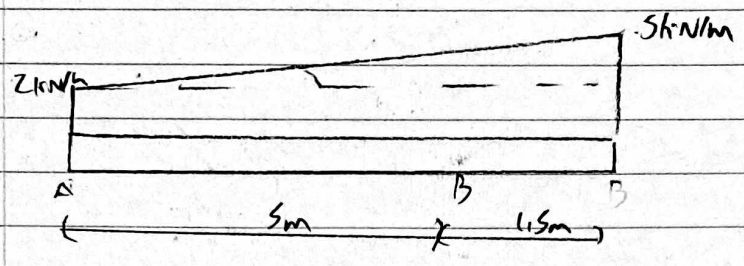
Solutions: 21-5-4.9-MK-05



$F = (2\text{kN/m})(5\text{m}+1.5\text{m}) + \text{kN/m}\left(\frac{1}{2}\right)(5\text{kN/m} - 2\text{kN/m})(5\text{m}+1.5\text{m}) = 22.75\text{ kN}$

$d = \dfrac{(2\text{kN/m})(5\text{m}+1.5\text{m})(5\text{m}+1.5\text{m})\left(\frac{1}{2}\right) + \left(\frac{1}{2}\right)(5\text{kN/m} - 2\text{kN/m})(5\text{m}+1.5\text{m})(5\text{m}+1.5\text{m})\left(\frac{2}{3}\right)}{22.75\text{kN}}$

$d = 3.714\text{ m}$