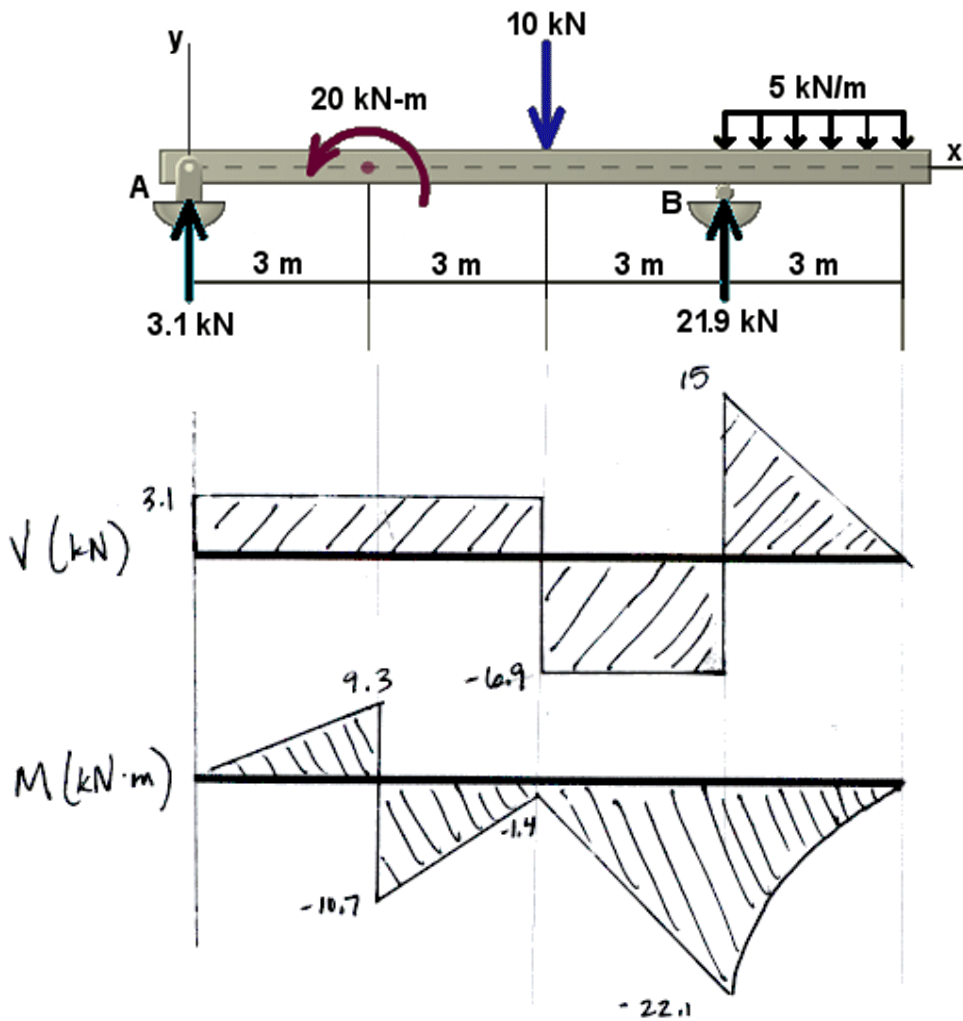


Draw the shear force and bending moment diagrams for the beam. Be sure to label all peak values.



If the beam has a square 200mm × 200mm cross section, determine the maximum flexure stress in the beam.

$$\sigma_{\text{flexural}} = \frac{M_y}{I} = \frac{(22.1 \times 10^3)(.1)}{\left(\frac{1}{12}\right)(.2)(.2^3)} = 16.6 \text{ MPa}$$

(T) top
(C) bottom