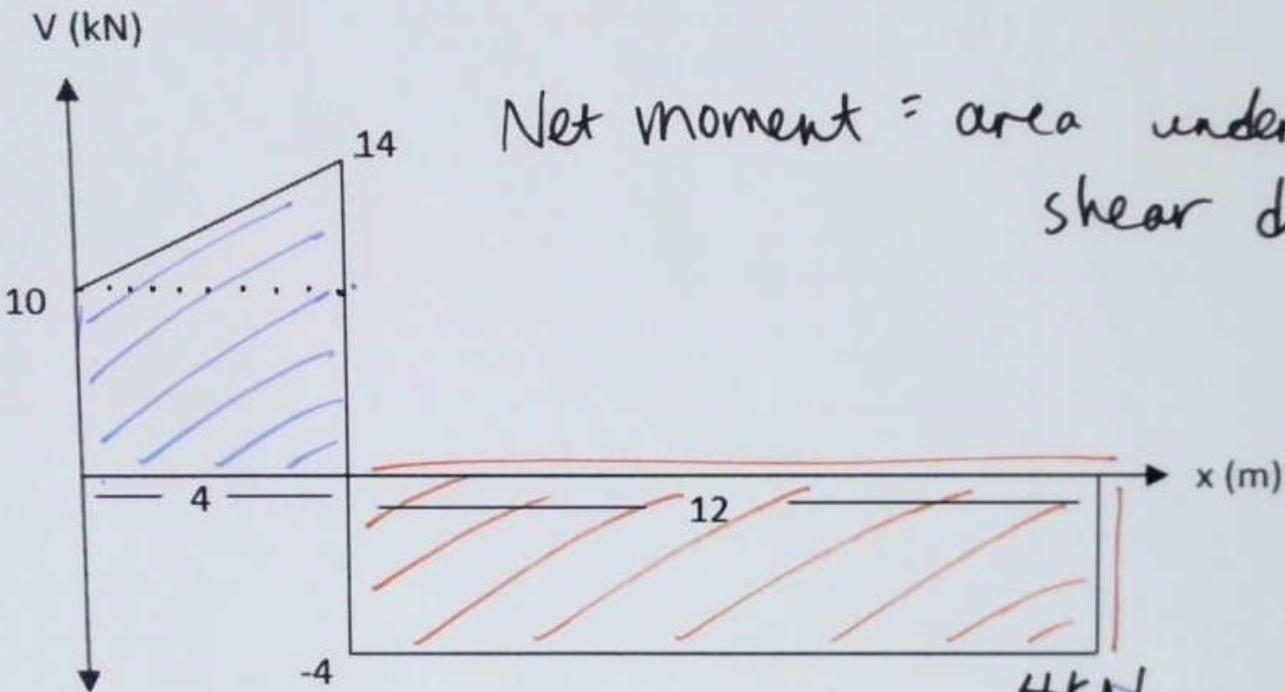


Calculate the maximum magnitude of the bending moment shown in the diagram. The bending moment of each end of the beam is zero, and there are no concentrated couples along the beam.

(Shear Load)



$$\text{Area} = (4\text{ m})(10\text{ kN}) + \frac{1}{2}(4\text{ m})(\cancel{4\text{ kN}}) = 48\text{ kN}\cdot\text{m}$$

$$\text{Area} = (4\text{ kN})(12\text{ m}) = 48\text{ kN}\cdot\text{m}$$

48 kN·m