

Shear force diagram for a beam with a triangular load. The beam has a total length of 10m, with a support at 4m from the left end. The load intensity increases linearly from 0 at the left end to 2 kN/m at the support. The diagram shows a constant shear force of 36 kN from the left end to the support, and a linearly decreasing shear force from 24 kN to -14.86 kN from the support to the right end. The area under the shear force curve is calculated as 144 kNm (positive) and 148.6 kNm (negative).

