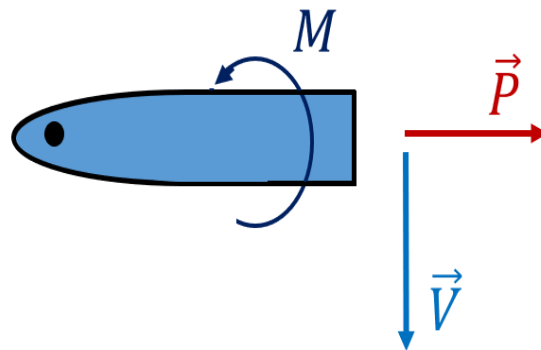


Chapter 10. Internal Forces and Moments

Section 10.1. Axial Force, Shear Force, and Bending Moment

Note. If a beam is cut, then at the cut, there are two forces and one moment:



The force \vec{P} is an *axial force* and \vec{V} is a *shear force*. M is the *bending moment*.

Note. By convention, we take axial forces as positive if they put the beam in tension. A shear force is positive if it tends to rotate the beam clockwise. A bending moment is positive if it bends the bar upward.

Example. Page 503 Number 10.11.