Georgia Institute of Technology

Applications in Engineering Mechanics

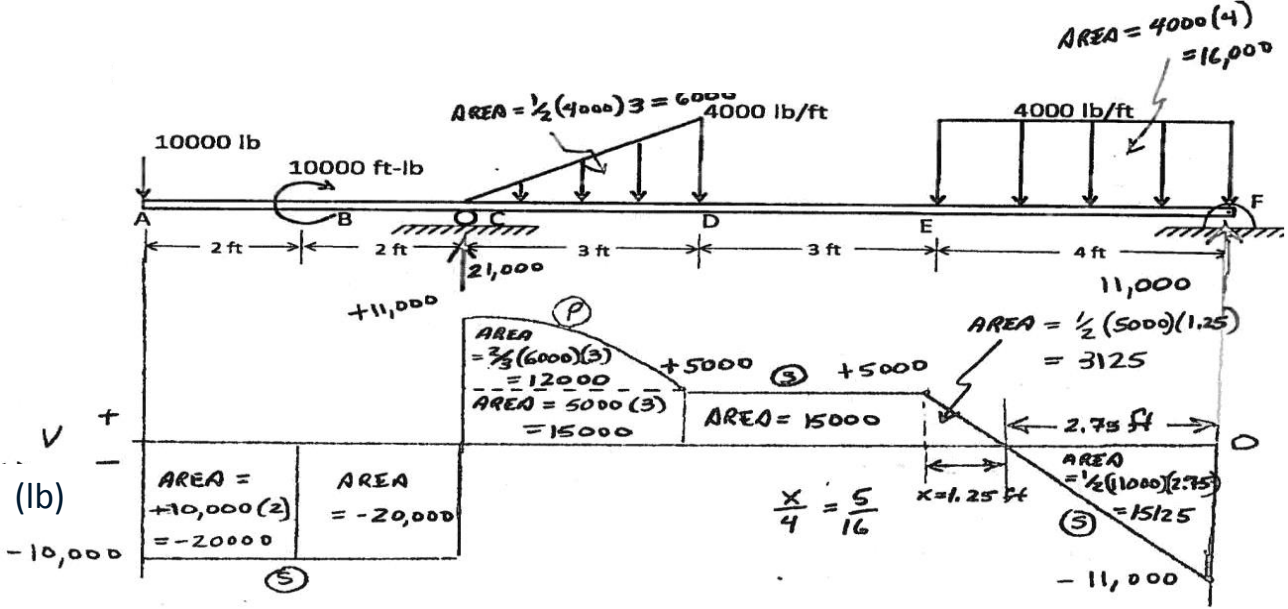
Dr. Wayne Whiteman
Director of the Office of Student Services
and Senior Academic Professional
School of Mechanical Engineering

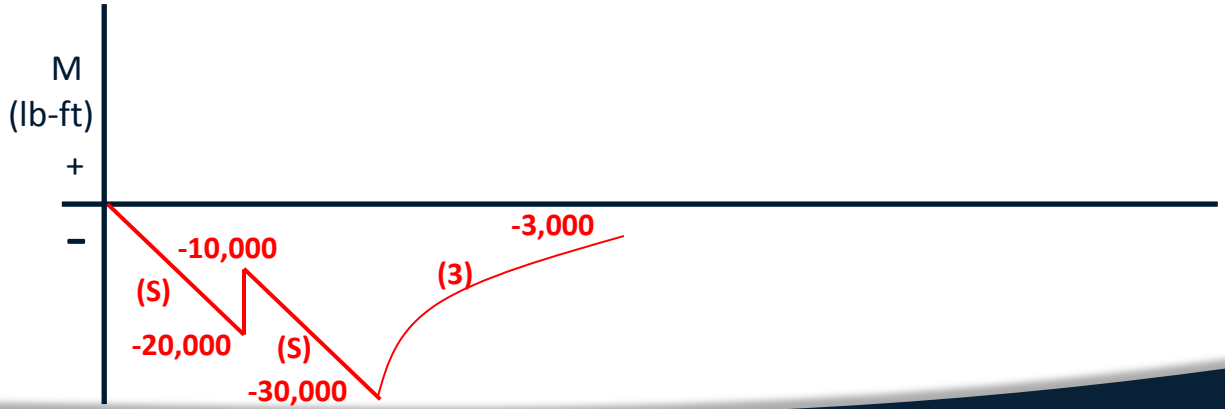
This course addresses the modeling and analysis of static equilibrium problems with an emphasis on real world engineering systems and problem solving.

School of Mechanical Engineering

Module 17 Learning Outcomes

- Determine internal Shear Forces and Bending Moments in multiforce members.
- Sketch a Bending Moment Diagram for a multiforce member





$$\frac{dM}{dx} = V \qquad \Delta M = \int_{x_1}^{x_2} V \, dx$$

Bending Moment

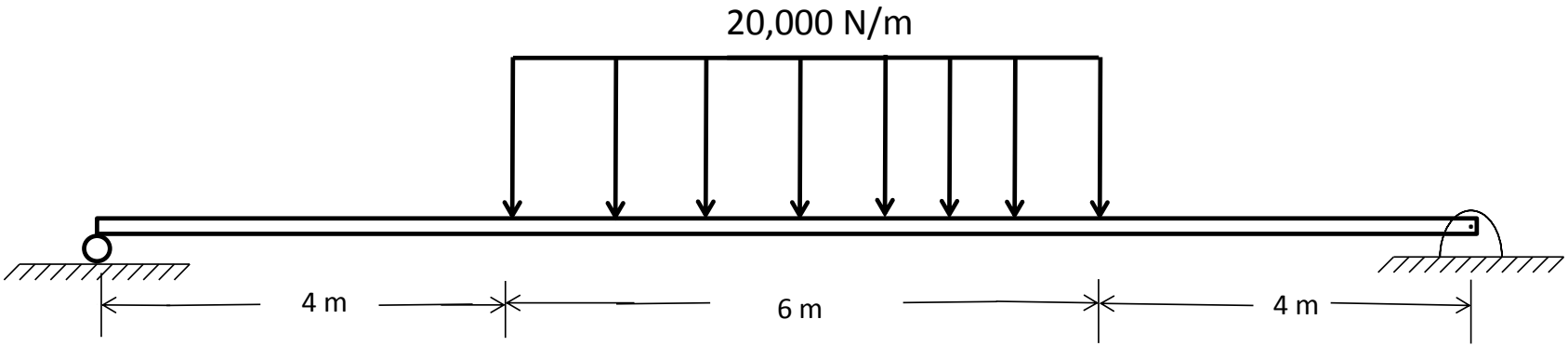
Positive

Negative

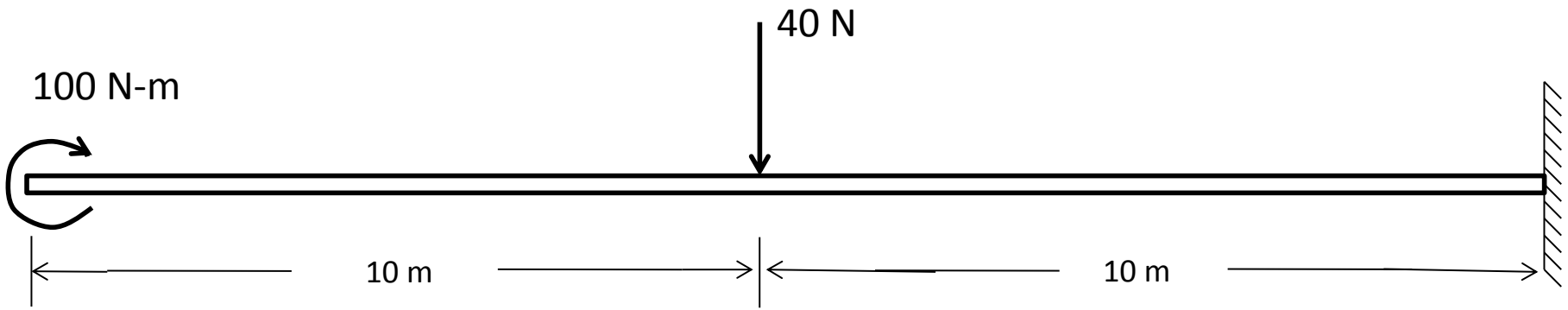
Smiley Face

Frowny Face

Worksheet 1: Draw the shear force and bending moment diagrams for the beam loaded as shown.



Worksheet 2: Draw the shear force and bending moment diagrams for the beam loaded as shown.



Worksheet 3: Draw the shear force and bending moment diagrams for the beam loaded as shown.