

## ME102: Subunit 2.3.5 Review Activity

1. Define *statically determinate*.
2. Find the circumferential stress in a nearly spherical balloon with an internal pressure of 1.5 atm (absolute), radius 15 cm, and wall thickness 200  $\mu\text{m}$ .
3. A  $\frac{1}{4}$ " diameter bolt is found to fail (twist apart into pieces) when a torque of 1500 N m is applied. What is the *modulus of rupture* of that material in that bolt?