

**MASSACHUSETTS INSTITUTE OF TECHNOLOGY**

**Department of Mechanical Engineering  
2.001 Mechanics and Materials I  
Fall 2006**

**Problem Set 10**

**Distributed:** Wednesday, November 22, 2006

**Due:** Wednesday, November 29, 2006

**Problem 1:** We're almost (but not quite) going to do Hibbeler's problem 6-50. Considering the structure that Hibbeler describes, loaded as described in the problem, find a) the bending stress  $\sigma_{xx}$  at points A and B and b) the radius of curvature of the beam. (You can skip the sketches.)

**Problem 2:** Hibbeler 6-89

**Problem 3:** Hibbeler 6-119