Housekeeping

- Tuesday
  - PL HW 12
- Thursday
  - ME HE 13
- Sunday
  - WA 7
- Tuesday
  - PL HW 14
Quiz 3

Mean score  75.1%
Standard deviation  24.7%
Median score  85.0%

Number of 100%  68
(11.9% of class)
Chapter 6: Structural Analysis
Main goals and learning objectives

- Determine the forces in members of a truss using the method of joints
- Determine zero-force members
- Determine the forces in members of a truss using the method of sections
**Given:** Loads as shown on the truss

**Find:** The forces in each member of the truss.
Method of sections

- Determine external support reactions
- "Cut" the structure at a section of interest into two separate pieces and set either part into force and moment equilibrium (your cut should be such that you have up to three unknowns)
Determine the force in member GC and GE of the truss and state if the members are in tension or compression.
What is the reaction force at C?

A. 400 lb ↑
B. 200 lb ↑
C. 400 lb ↓
D. 200 lb ↓

Use the method of joints to determine the internal force in all the truss members. Use the convention that members in tension have positive internal forces and members in compression have negative internal forces.
Given: Loads as shown on the truss.

Find: The force in members KJ, KD, and CD.
**Given:** Loads as shown on the truss.

**Find:** The forces in members ED, EH, and GH.