

**2.094**  
**FINITE ELEMENT ANALYSIS OF SOLIDS AND FLUIDS**  
**SPRING 2008**

**Homework 10**

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TA: Do-Nyun Kim

Assigned: 05/06/2008  
Due: 05/13/2008

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**Problem 1** (10 points):

Consider page 683 in the textbook. Show that using the principle of virtual temperatures to solve Eq. (7.94), with 2-node elements, the relation in Eq. (7.97) is obtained.

**Problem 2** (20 points):

Exercise 5.41 in the textbook, page 452.