

2.092/2.093
FINITE ELEMENT ANALYSIS OF SOLIDS AND FLUIDS I
FALL 2009

Homework 3

Instructor: Prof. K. J. Bathe
TA: Seounghyun Ham

Assigned: Session 7
Due: Session 9

Problem 1 (20 points):

Consider Example 4.5 (p. 166) of the textbook, static analysis, at time $t=1.0$. Solve for the displacements (with E any positive value) and stresses of the finite element model. Compare these in plots along the length of the structure with the exact displacements and stresses of the mathematical model used.

Problem 2 (20 points):

Exercise 4.13, p. 221 of textbook, but for element 1.

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