

ASEN 5007 Homework Assignment #3

Chapters 6–7 of Notes

Due Thursday Sep 17, 2008 — Thursday Sep 24 for CAETE students

Please don't forget to attach this cover sheet to your returned homework and write your name(s) on it

Exercises:

7.1 (easy, about a minute)

7.2 remember that *no triangles are allowed* when you draw a mesh within region ABCD. Several acceptable solutions with quadrilaterals are possible; some are tricky.

7.3

7.4 (long by hand, may be helped by computer or calculator)

7.7 (see Notes below)

Grading weights: given at the start of each Exercise.

Note 1: please do all necessary sketches for 7.1, 7.2 and 7.7 on your own paper. Engineering paper should be used. You should start each Exercise on a new page to help grading, but don't need to do that for items of an Exercise.

Note 2: For 7.7(d) and 7.7(e) truncate the mesh at a sufficiently large distance from the loads. (The mesh should occupy a rectangular region and use rectangular elements, since that is easy to draw). No need to use infinite elements, but be careful that vertical rigid-body motions be restrained if necessary.

First Midterm Exam Announcement

The first midterm exam is tentatively planned to be given on Th October 8 at class time for on-campus students. Exam covers Part I of course (Chs. 2-10). Review class on Tu Oct 6. More details in the next homework assignment.