

PS #7**Due: 3/30/10 Tue Lab****Due: 4/2/10 Fri Lab**Objectives

1. To determine un-damped free vibration characteristics of a tapered rod.
2. Compare EXCEL finite element results with COSMOS results with mechanics of materials fundamentals.

The Problem

Using the procedures outlined in lecture & lab, develop an EXCEL spreadsheet and a COSMOS model of a tapered rod. Determine the fundamental frequency and mode shape of the tapered rod using both EXCEL and COSMOS. Compare the results.