

ME 4189 Spring 2016
Homework assignment #4
Due on Thursday 03/03/2016

Make sure to read all the instructions listed on this document!

Learning objectives

Please study your class notes and the corresponding sections of the textbook before completing the assignment. After completing this assignment, you should be able to:

- Derive the equation of motion for a 2DOF systems
- Find the natural frequencies and mode shapes of 2 DOF systems
- Find the response of a 2DOF system to initial conditions
- Find the steady-state response to harmonic excitation of a 2DOF system

Solve the following problems of the textbook:

- 5.17
- 5.20
- 5.31
- 5.61

For each problem, you need to show your work and circle your final answer. Please staple your homework.