

PHYSICS 331 ADVANCED CLASSICAL MECHANICS
Problem Set 33

Problem 1

Use Lagrange's approach to extract the equations of motion (equations 12.1) for the two-mass/three-spring system shown in Figure 12-1 of our textbook.

Problem 2

Thornton and Marion: Chapter 12, Problem 4.

Problem 3

Show that condition 12.23 follows from the initial conditions described by the equations in 12.22 for the case of the weakly coupled system. All references are to our textbook by Thornton and Marion.

Problem 4

Thornton and Marion: Chapter 12, Problem 11.

Other Things

Read Marion and Thornton's chapter 12, sections 12.4 and 12.6, and skim through section 12.5. Please remember to submit your journal entry.