(a) Problem 5.41

(b) Problem 5.42 + Stability Analysis for Problem 5.40

(c) Problem 5.44

(d) Problem 5.50

(e) Problem 5.75

All problems need to be solved by

- Lagrange and direct methods (and solutions compared).
- Static equilibria need to be determined.
- Linearized equations of motion around each static equilibrium need to be derived.
- Stability analysis for each linearized equation of motion around each static configuration.

(f) Self Evaluation in another sheet as per the instructions in the first class.

All students are supposed to work on all the problems assigned.