MECH 3140
Homework #6

By Tuesday 10/10/17:
Make sure you have worked the exam problems from Exam #1. Be able to find the
eigenvalues for Problem #1, the time constant for Problem #2 and the eigenvalues for
problem #3

From Palm (Chapter 8, by Tuesday 10/10/17)
Problems 1-5, 8, 16, 38-39,

ALSO (by Tuesday 10/17/17):

Derive the equation for velocity for the system above (when $F(t)=F_0\sin(\omega_n t)$).
What happens to the magnitude of the velocity (output) as you increase the input
frequency ($\omega_n$)?
More Modeling Problems (if you need them)

(Note: You should be able to find the eigenvalues of the system that are first or second order, and sketch their possible locations on the s-plane). If there are any old HW problems you have not worked – I suggest working them!