

Reading and HW #4 PHY360 Fall 2016 Due Friday 9/30/2016

- Reading** Please read Chapters 4 and 5 of the textbook (A.P. French, “Vibrations and Waves”).
- Problem #1** Problem 4-3 in the textbook. Understand the differences in phenomena for damped free oscillations and damped forced oscillations.
Damped/Free
- Problem #2** Problem 4-4 in the textbook. Completely characterize damped oscillator in terms of experimental data, understand how to implement initial conditions on solution.
Data to oscillator
- Problem #3** Problem 4-5 in the textbook. Understand how to utilize knowledge of the Q-factor to set up the equations for forced oscillations of a pendulum.
Damped: Q-factor
- Problem #4** Problem 4-7 in the textbook. Understand how to characterize behavior of oscillator in terms of energy in system.
Oscillator Energy
- Problem #5** Problem 4-13 in the textbook. Understand how to characterize oscillator in terms of data obtained near resonance.
Oscillator Energy