

Updated - 180A Study Guide for Quiz 6 - Spring 2009

Chapter 12 - Mechanical Waves

Concepts: Mechanical Waves, Sound, Periodic Waves, Wavelength, Frequency, Wave Speeds, Transverse and Longitudinal Waves, Reflections and Superpositions, Standing waves (both Transverse and Longitudinal), Fundamental frequencies, Normal modes, Interference, Beats, Doppler Effect

Figures: 2, 3, 4, 5, 6, 10, 11, 12, 13, 14, 16, 23, 24, 31

Examples: 1, 2, 3, 4, 5, 10, 11, 12, 13

Multiple Choice Questions: 1, 2, 3, 4, 5, 6, 7, 8, 13

Basic Problems: 1, 2, 5, 6, 7, 14, 17, 23, 24, 27, 36, 37, 50, 52, 55, 56, 57

Medium Problems: 30, 60, 61, 64, 67, 75

All of these figures, examples, questions and problems are closely related. The basic problems are warm-ups to the medium problems. If you practice some, you practice many.

Chapter 13 - Fluids

Concepts: Fluids Mechanics, Density, Pressure, Pascal's Law, Archimedes's Law, Buoyancy, Fluid Flow, Continuity Equation, Bernoulli's Law, Applications to Bernoulli's Law

Figures: 4, 7, 13, 19, 28, 29, 32, 34, 35

Examples: 1, 2, 3, 4, 6, 7, 9

Multiple Choice Questions: 1, 2, 3, 4, 5, 11, 12, 14

Basic Problems: 1, 4, 10, 11, 15, 17, 20, 29, 43, 44, 47, 48, 50

Medium Problems: 22, 27, 31, 32, 33, 37, 51

All of these figures, examples, questions and problems are closely related. The basic problems are warm-ups to the medium problems. If you practice some, you practice many.

You will be allowed to use only your books (no notes, loose papers or stickers).

The final Quiz 6 is on Monday May 18th from 10:30-12:30.

This quiz will still be 75 minutes, not 120 minutes.

There will be two Bonus Problems from Chapter 13.

The use of your books may slow you down. Please be prepared. Read and Practice.