

Test 3 Study Guide 195 Fall 2008

Chapter 9 - Linear Momentum

Equation: 9.1 Derivation

Example 9.6

Basic Problems: 2, 15, 16

Medium Problems: 18, 19, 5, 67

Chapter 10 – Rotation

Displacement, Angular Velocity, Angular Acceleration, Rotational Motion Equations, Linear to Angular Conversions, Rotational Kinetic Energy, Moments of Inertia, Torque

Equations: Derive KE_T to KE_R , 10.15-10.17, Derivation of 10.20

Example: 4, 7, 10, 12, 13

Figure: 7, 12

Table 1, 2, 3

Basic Problems: 1, 3, 4, 5, 10, 32, 33, 34

Medium Problems: 9, 35, 36, 44, 52, 56, 71, 72, 74

Chapter 11 – Angular Momentum

Vector Product, Angular Momentum, Conservation of Angular Mom.

Equation: 1, 2, 3, 6, 8, Derivation 11

Figures: 4, 7

Basic Problems: 22, 23, 24, 25, 27, 29

Medium Problems: 28, 32, 37, 39, 50, 46

Chapter 12 – Static Equilibrium

Example: 1, 2, 3

Medium Problems: 1, 10, 19, 37, 40, 42

Chapter 15 - Oscillatory Motion

Hooke's Law, Simple Harmonic Motion, Energy in SHM, The Pendulum, Oscillations

Equations: Derivation 15.6, 7, 8, 9, 13, 14, 21, 24, 26

Basic Problem: 2, 3, 4, 5, 24

Medium problems: 11, 25, 36