Chapter 6

Exercise 6.6 Exercise 6.10 Exercise 6.12 Exercise 6.18 Exercise 6.24 Exercise 6.32 Exercise 6.40 Exercise 6.56 Example in which 2d force is applied on the object that moves in x and y directions Work done by Gravity in moving the object from position y1 to position y2

Chapter 7

- Exercise 7.2
- **Exercise 7.10**
- Exercise 7.12
- Exercise 7.14
- Exercise 7.20
- Exercise 7.26

Problem of the object sliding down from the incline and hitting the spring on the ground

Problem of the object falling from the hight and landing on the spring

Problem in which the object initially has given kinetic and gravitational potential energy then

at the end it has different position and velocity. Question asks to calculate final kinetic

and potential energy

Chapter 8

Exercise 8.8

Exercise 8.16 Exercise 8.31 Exercise 8.38 Exercise 8.48 Exercise 8.54 Problem of calculating the center of mass of the several objects in 1d or 2d cases Problem of the car collision in 2d case Problem of elastic collision in 1d case

Chapter 9

Exercise 9.6 Exercise 9.16 Exercise 9.18 Exercise 9.28 Exercise 9.34 Problem of calculating of moment of inertial of several objects Problem of acting force on rotating disk