Homework 3

SABIC: Physics

Due February 9, 2016

Reading:

Read Chapter 5.

Problem 1: practice with estimation

(a) How fast must a satellite travel in a circle in order for gravity to provide the appropriate centrepital acceleration? (section 3.4) How long does it take to make a complete rotation? The Earth's radius is 6380km.

Problem 2: Projectile and Circular Motion

(a) Book problem 3.10

(b) Book problem 3.30

Problem 3: Newton's Laws

(a) Book problem 4.37

(b) Book problem 5.13