

# PHYS-UA 120 Dynamics Problem Set 0

*Due at the beginning of Lecture on 2014 September 09.*

## **Problem 1:**

Kibble & Berkshire, Ch 1, problems 1 and 2

## **Problem 2:**

Kibble & Berkshire, Ch 1, problem 3

## **Problem 3:**

Kibble & Berkshire, Ch 1, problem 20

## **Problem 4:**

In Chapter 1, page 5, Kibble & Berkshire refer to the axis directions  $\mathbf{i}, \mathbf{j}, \mathbf{k}$  as “unit vectors”. In Appendix A, Problem 15, they refer to a rotation matrix  $\mathbf{R}$  as a “tensor”. Give some reasons Prof Hogg might object to both of these characterizations.