Reading Question Week 14 Day 1

For each day’s reading question, write your name, section, and table number on the upper right hand corner of your answer and hand it in at the start of class that day.

Dec 2/3 W14D1 Gyroscopes
Reading Assignment:
Chapter 22 Three Dimensional Rotations and Gyroscopes, Sections 22.1-22.3

Reading Question

1) (a) Explain how the angular momentum about a point can change in time if the magnitude of the angular momentum is constant. (b) Describe two examples in circular motion kinematics of a vector that is constant in length but changes in time.

2) (a) Explain how the angular momentum about the pivot point of a precessing gyroscope changes in time. (b) For a precessing gyroscope what force produces the torque about the pivot point? (c) Is this torque constant in time? Explain your answer.