PHY820 Homework Set 9

1. [5 pts] Goldstein, Problem 5-3. Note that the tensor of inertia generally *depends on time* in the frame of an observer external to the rotating body.

2. [10 pts] Goldstein, Problem 5-13. You can leave the time proportional to a dimensionless integral.

3. [5 pts] Goldstein, Problem 5-14.

4. [10 pts] Goldstein, Problem 5-16.

5. [10 pts] Goldstein, Problem 5-17. Note that there are two rotations here at play for the cone. The angular velocities add up as vectors.