

## MAE578, Spring 2015 Homework #6

This is a "half" homework which will be given a weight of 0.5, compared to 1.0 for all other homework assignments.

1. (25%) Solve Prob 1(a) in Chapter 8 of the textbook. You do not need to solve Prob 1(b) and 1(c).
2. (25%) Solve Prob 2 in Chapter 8. Qualitatively sketch the trajectory of an air parcel that starts at the upper troposphere at  $10^{\circ}\text{S}$  and moves to  $20^{\circ}\text{N}$  while preserving its absolute angular momentum.
3. (50%) Solve Prob 5 in Chapter 8.