arth System Science 5: THE ATMOSPHERE / Homework 4 (due 5/31/2007)

Name_____

Student ID_____

SHORT ANSWER. (6 points per question)

- 1) This type of air mass is responsible for much of the precipitation along the coast of western North America
- 2) A(n) ______ front always slopes back over itself.
- 3) This type of front moves very slowly, if at all: ______ front.
- 4) A(n) ______ front can often overrun the air mass ahead.
- 5) ______air masses can form over the southwestern United States in summer, and are typically hot and dry.
- 6) Air masses that form over northern Siberia are most likely to be ______ air masses.
- Air mass formed over the desert southwest of the U.S. and northern Mexico are ______ air masses.
- 8) _____ has two components, relative vorticity and Earth vorticity.
- 9) The Bergen scientists developed the idea of ______ to explain the formation of mid-latitude cyclones.
- 10) As opposed to cyclones, ______ are often associated with good weather.

ESSAY. (20 points per question)

11) Describe the three ways in which an occluded front can form.

12) Describe the various types of clouds that would likely occur as a mid-latitude cyclone passes over a given location, beginning with the approach of the warm front and then following by a cold front