1. Consider the civil time at the location of your hometown within its time zone. If you are from Ithaca, give the answers as if your hometown were Kansas City, MO.
   a. What is the longitude of your hometown?
   b. What is the longitude of the center of the time zone in which your hometown is located?
   c. In general, does the sunrise occur earlier or later than it does at the center of the timezone in which it is located? By how much? Be sure to show how you arrive at your answer.

2. Visit the web page of the Astronomy Picture of the Day for October 7, 2014. The image is a mosaic of 16 separate panoramic shots which give a view of a wide area of the night sky as seen from the Capitol Reef National Park in Utah. Be sure that your display can show both the plain image and one with annotations.
   a. What is different in the appearance of the two stars Deneb and Antares in the image?  
      Hint: Be sure to be explicit about everything you notice.
   b. The Explanation says "... it appears to be the plane of our Milky Way Galaxy". Make a simple sketch of the (unannotated) image (or make a printout and include it as a separate page). Note on it for your future reference what feature in the image is the "plane of our Milky Way Galaxy". In a sentence or two describe (for yourself) what this feature looks like.
3. Use the diagram below to show the local perspective for an observer in your hometown. Draw in and label the locations of: the horizon, the zenith, the meridian, the cardinal directions (N, S, E, W), the celestial pole and equator, as well as the Sun's path in the sky on Dec 21st. If your hometown is Ithaca, make the diagram for Kansas City, MO.

hometown ________________________________

latitude ________________________________

altitude of pole _________________________

altitude of point where Cel. Eq. crosses meridian ___________________