End of Unit 2 Assignment

This assignment consists of four parts. The first is a review with a couple of practice questions linked directly to their answers. The second is a short quiz that you take using WebCT. It will be instantly scored for you by WebCT; you only get one chance to take it, however, so be sure you are ready! The third part is an essay question. The question appears below; when you are ready to answer it, log on to WebCT and submit your essay. Finally, for each unit, you should log on to WebCT and contribute a question, an answer, or a comment to one of the posted topics. If you would like to introduce a new topic instead of contributing to an existing thread, please send your topic idea to your instructor. If you find the material in this unit challenging, you might want to start with the "discussion" part of the assignment in order to get some help with some of the ideas.

Brief summary of Unit Two:

Topics we have covered include the definitions of latitude and longitude and the importance of the Equator, the Prime Meridian, the International Date Line, and the poles in this system. We have also covered different kinds of time, time zones, and the use of the "Earth Clock" to visualize how these all relate to one another.

Before you go to the quiz, see how you do on these two questions. If you have trouble, you might want to review the unit, send a question to the discussion group, or seek help from the instructor.

**Practice Question One**
City A is located at 30E, 40N and City B is located at 40E, 30N. To get from A to B, do you go north or south? East or west? Will your trip be shorter if you first go east or west, then go north or south, or will it be shorter if you first go north or south, then east or west? Explain.

**Practice Question Two**
It is 7 am daylight savings time on Monday in California. You are planning to call your cousin who is in Sydney, Australia. What time and what day is it where he is? California is in the time zone at 120W and Sydney is in the time zone at 150E. Explain your answer.

When you are ready, WebCT and take Quiz Two.
You will get instant feedback on your score on Quiz Two (and your instructor will also be informed of your score). If your score is OK, you may proceed directly to the Essay Question Two on WebCT. Otherwise, you might want to look at what you missed, ask your instructor about questions you missed, or review relevant parts of the unit.

**Essay Question**

Explain why the solution to the "Longitude problem" was worth a very great prize. How did people navigate before the "Longitude problem" was solved?

When you are ready to answer this question, go to [WebCT](http://www.polaris.iastate.edu/NorthStar/Unit2/unit2_eou.htm) to write your answer.

**Alternative to the Essay Question**

If you have friends who live at least 600 miles east or west of you who are willing to help out (or already in this class), you may replace the above Essay Question with this activity:

First, find out when true solar noon happens where you are. One way to do this is to find out when the shadows are aligned N-S exactly - see "finding north" in Unit One. A few minutes before solar noon, contact your friend. Have him or her mark the shadow of a yardstick on the ground when you say "It's noon here". (It may be easier to say "In 15 minutes it will be noon here. Mark the shadow exactly 15 minutes from now".) Have your friend measure the length of the shadow and also estimate its direction as best he can; or, if he is really helpful, have him determine the time of noon where he is and tell you that. Report your results: What direction was his shadow when yours was due north? How much time difference was there between his noon and yours? Did you encounter any surprises or difficulties carrying out this exercise?

Don't forget to contribute to the discussion on [WebCT](http://www.polaris.iastate.edu/NorthStar/Unit2/unit2_eou.htm) on one of the topics in this unit!