GEOG 201– MAP INTERPRETATION & GPS Assignment 02 - Finding digital raster graphics (DRGs) on the web

The United States Geological Survey (USGS) is a public agency, which means that you, the U.S. tax-paying citizen own the data (though always check with your lawyer on the finer details of what this means). It is important to understand two things:

- 1. You should never pay money for the data other than the shipping or printing costs
- 2. It can be darn hard to find free versions of this data (though it's finally getting easier).

The following assignment will let you explore where data exists in both hard copy form and on the Internet. Answer the following questions and turn in the completed form at the beginning of next class meeting.

1.) Where can you locally (within 50 miles of Lancaster) purchase 7.5 minute (1:24,000) USGS quad maps? *Hint: try using Google Maps to locate a local seller.*

2.) Give the company a call and ask how much it costs to purchase a copy of the Lancaster West
7.5 minute quadrangle. Write the cost below. *Note: You do not need to actually buy this* map!

3.) Go to <u>http://www.usgs.gov/</u>. Write down the name of each of the nine tabs (hint: they're the yellow-orange boxes under the USGS logo).

4.) Click on the "Maps, Imagery, and Publications" tab. Write down the headings for the four sections (the brown boxes enclosing different links) below:

5.) Click on "Download digital scans of topo maps" in the "Maps" section. This will take you to a new page, "The USGS map store." Click on the "Map Locator" link.

6.) Under "Step 1" of the webpage you will be asked to enter search criteria. Type "Lancaster, California" into the box and click "Go". This will zoom and pan the map frame to Lancaster. Click on the red pointer by the Lancaster map text. Write down the name of all of the maps available for download:

7.) Download the map with the 7.5 x 7.5 extent that was published in 1974. It will give you a "zip" file. If using Microsoft Windows, you should be able to right click and select "Extract All." When the file has been unzipped, write down the filename of the actual map:

8.) What file type is the map?

9.) When opening the map for the first time on your computer, it will likely open a "warning" window telling you that you need to install the GeoPDF plug-in. **YOU DO NOT NEED TO DOWNLOAD THIS PLUG-IN**. However, the plug-in is pretty cool. It shows the latitude and longitude of your cursor, allows you to measure distance, and some other stuff.

10.) If you haven't already, go ahead and open your copy of the *Lancaster West, Calif.* topo. Find the contour interval for the map (look around the border of the map) and write it below:

That's it for now. Make sure this map is saved to your computer in a place you'll remember; we'll use it for future assignments. Turn this completed sheet in at the beginning of the next class meeting.