Name _____

I Title: Computer Topographical Map Lab

<u>II Purpose</u>: The purpose of this sheet is to increase your knowledge of topographical maps and latitude and longitude.

III Materials: Pen or Pencil, computer, signature for computer, topographic map for the computer

IV Procedure:

- 1. Log on to computer by entering your name and pass word
- 2. Click on the HS OCEAN drive
- 3. Click on Maps icon
- 4. Click on Topomaps icon
- 5. Click on Topo 32
- 6. Click on START,
- 7. Click what looks like a <u>Play</u> button to advance to next screen.
- 8. On the main menu make sure use with electronic map has a gray highlight at the bottom of the picture screen.
- 9. Click on the button Introduction
- 10. Then hit the play button key at the bottom right hand corner. Read the slides advance every time you're done reading the screen. Click the FYI button to give you more information. Then you will come to

GENERAL TOPOGRAPHIC MAP INFORMATION

- 11. Please click the play button to continue.
- 12. Read each screen and advance at your own speed. Do not hit the stop button (the black square) or you will go back to the beginning of the program.
- 13. You will come to a map. It asked you the name (title) of the map. Click on the map icon at the bottom you can zoom in and out and use the hand to move about the map. Type it in the program. Write down the name of the map below.
- 14. In what general area of the state does this map located represent the area?

Date _____

Period _____

15. Make sure you read about true north and magnetic north and use the demonstrations on the program.

16. Continue on until you get to the symbols on a topo map. $(x) = \frac{1}{2} \frac$

a) What do the following colors mean on a topo map?

Black	_Salmon
Green	_Blue
Brown	Purple

****You can complete the programs tasks on the map symbols or hit skip the skip button on the lower left hand side. But to answer the next questions you should look and the slides with the map symbols. Please take your time drawing. Be neat.

b) What is a drawbridge symbol?	
c) What is a windmill symbol?	

17) Keep advancing on to further screens until you find the Name of the river in the southeast portion of the map. Please write down the name of the river below.

After this you come to the title Map Scale hit the **<u>STOP</u>** button.

You should come back to the main menu

Part II

Please click on the number 4 button, Location: Latitude and Longitude.

18) Advance through the screens and read the information. When you get to the Longitude slide that shows the prime meridian in blue and defines it in top left corner, hit FYI and read through those slides and answer the following question. What year was the Prime Meridian agreed upon?

19) Click until you come to a map of Europe, France, Germany, Switzerland Italy and Spain are shown. The computer cursor will show you Latitude and Longitude coordinates in degrees, minutes, and seconds.

Please list the coordinates of Milan Italy in degrees, minutes, and seconds.

Latitude ______ ____

Longitude ______ ____

Please list the coordinates of Rowen France

Longitude ______ ____

After this press the play buttons until the end of program. When you hit Public land Survey hit the stop button.

Part III

Now you should be on the main menu.

20. Hit the number seven (7) button that says principles of contour lines, then hit the play button.

21. Click through the slides until you get to the general rules of contour lines Please write them down below

First rule	
Second rule	
Third rule	
Fourth rule	
Fifth rule	
Sixth rule	
Seventh rule	
After you write down the rules continue with the slides until	
22. On the map which direction is the St Charles stream flowing	

Part IV Topographic Profiles

- 23) Hit the button for topographical Profiles, and hit the play button. Click and read each slide.
- 24) Click through until you get the three maps.
- 25) Click on Map 1 and draw the map's profile on the screen.
- a) What is the highest *elevation contour line* on Map1 _____?
- b) What would be the highest possible point on the mountain on Map 1_____?

After you are finished doing things on your own hit the review button.

<u>Part V Review</u> Go to main menu and hit review button

- 1) What type of roadway is illustrated?
- 2) Skip the panel with them labeling the sections (Questions that you skip you can hit the (I give up) button and it will give you or highlight the answer then hit the Is this Right button
- 3) Drag the elevations to the correct box. What is the elevation of the depression line?
- 4) What is in section number 9
- 5) What natural feature is covering most of section 33_____
- 6) What is the approximate local relief of this map_____
- 7) What man made feature is in section 5_____
- 8) What is the man made feature located between the ocean and the highway?
- 9) Skip question
- 10) In what direction is the <u>Stream A flowing</u>?
- 11) In what direction is <u>Stream B</u> flowing?
- 12) Skip question
- 13) Skip question

14) What is the latitude and longitude of Barcelona?

- 15) Skip this question
- 16) After you are done with this hit the Stop Button