



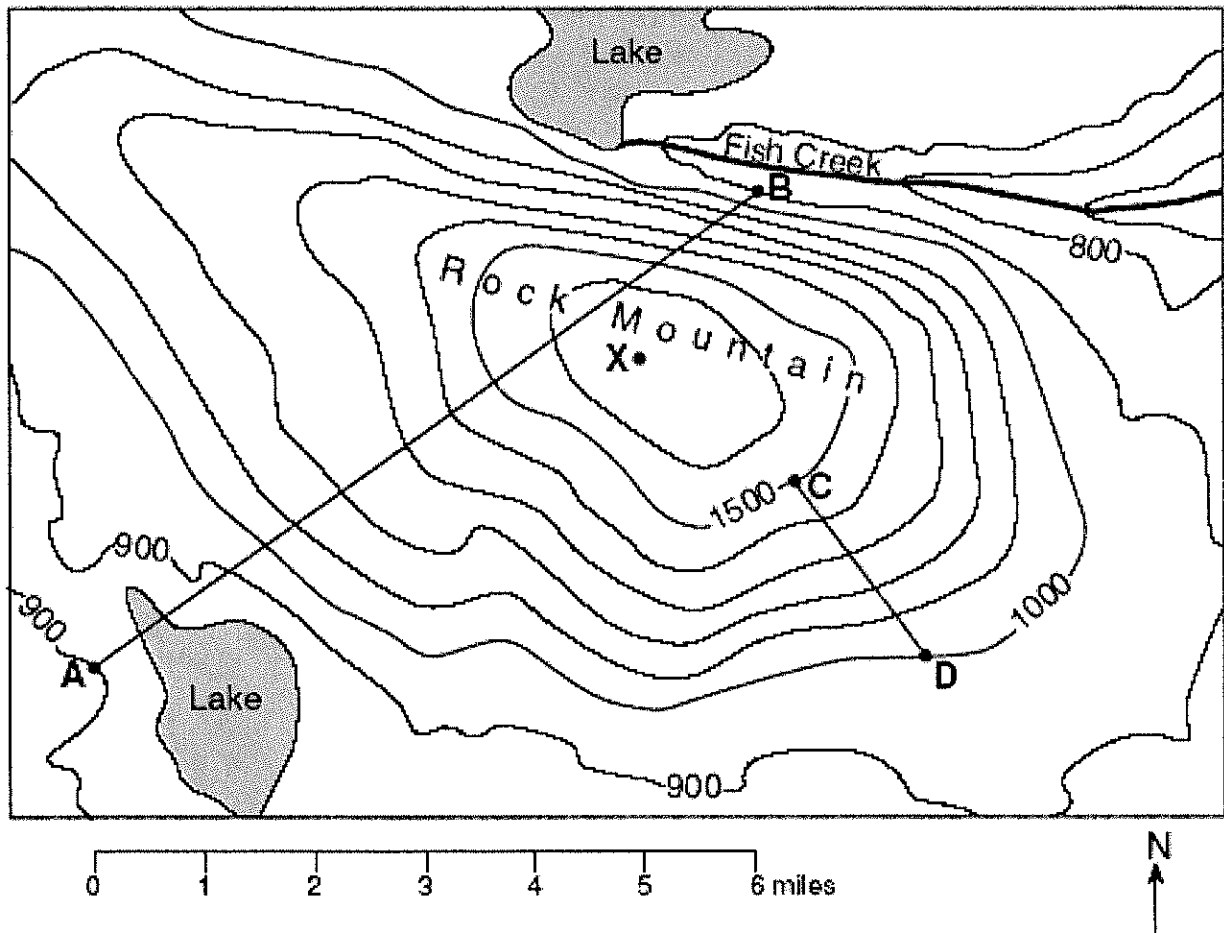
Earth Science

Assignment # _____

Name: _____ Date: _____ Period: _____

Topographic Map Worksheet

Base your answers to the following questions on the topographic map below. Points *A*, *B*, *C*, *D*, and *X* represent locations on the map. Elevations are measured in feet.



1. What is the elevation of each of the following points?

A. _____ B. _____ C. _____ D. _____

2. What is the contour interval of this map? _____

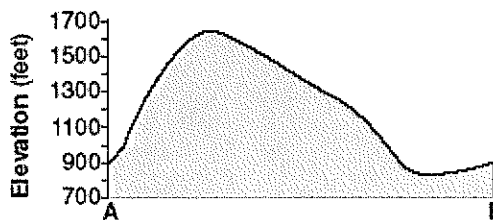
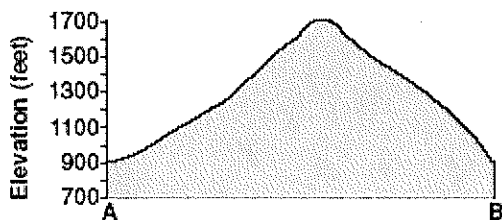
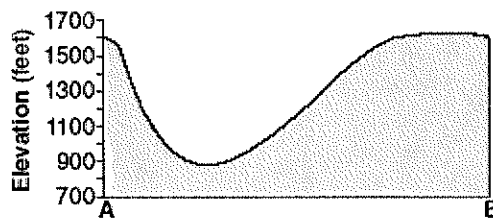
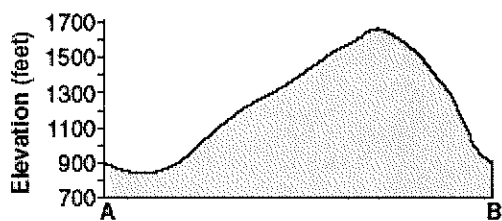
3a. Calculate the Gradient between C and D.

3b. Calculate the Gradient between A and B.

4. In what direction does Fish Creek Flow? _____

5. What is the elevation of Point X.? _____

6. Which cross section best represents the profile along straight line AB?



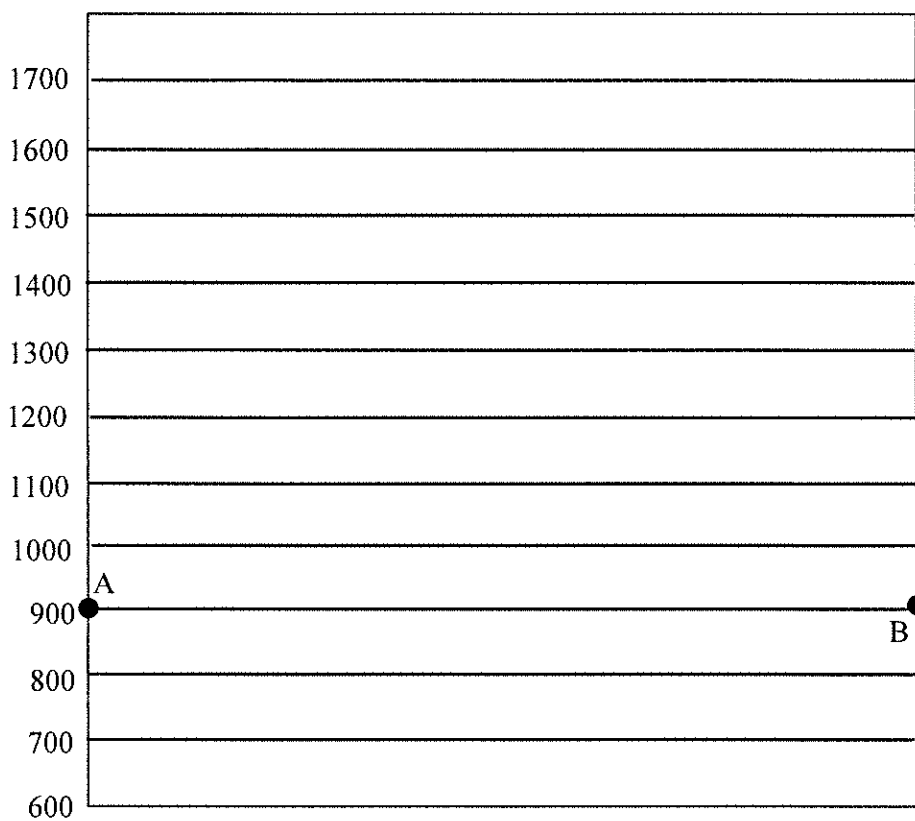
7. Which side of Rock Mountain is the steepest? (compass direction) _____

8. Which side of Rock Mountain has the gentlest slope? (compass direction) _____

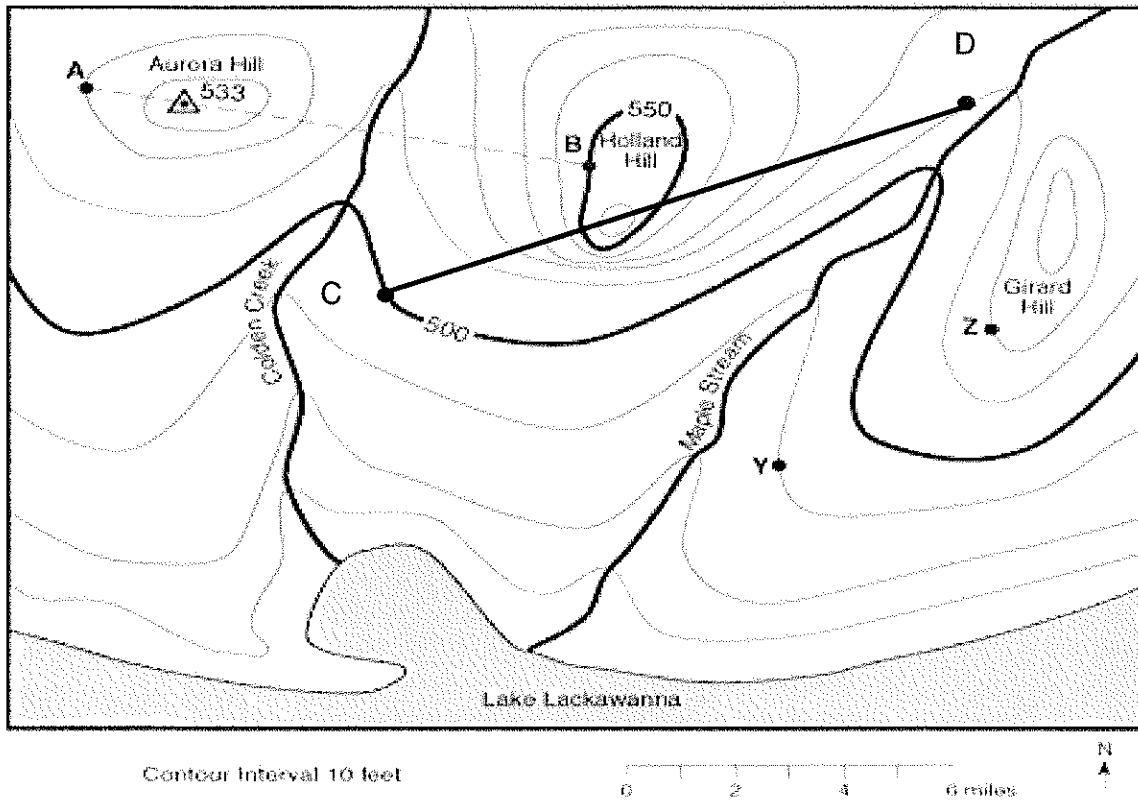
9. On the grid, construct a topographic profile from point *A* to point *B* by following the directions below.

a. Plot the elevation along line *AB* by marking with a *●* each point where a contour line is crossed by line *AB*. Points *A* and *B* have been plotted for you.

b. Complete the profile by correctly connecting the plotted points with a smooth, curved line.

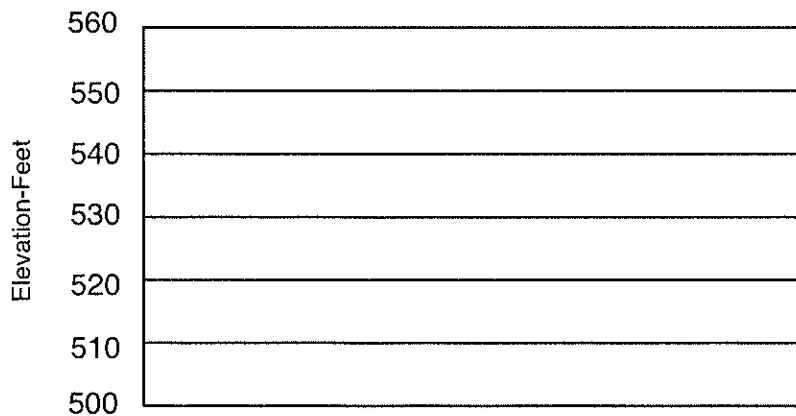


Topographic Maps



1. What is the direction of stream flow for Maple Stream? _____
2. Provide an evidence that supports your answer.

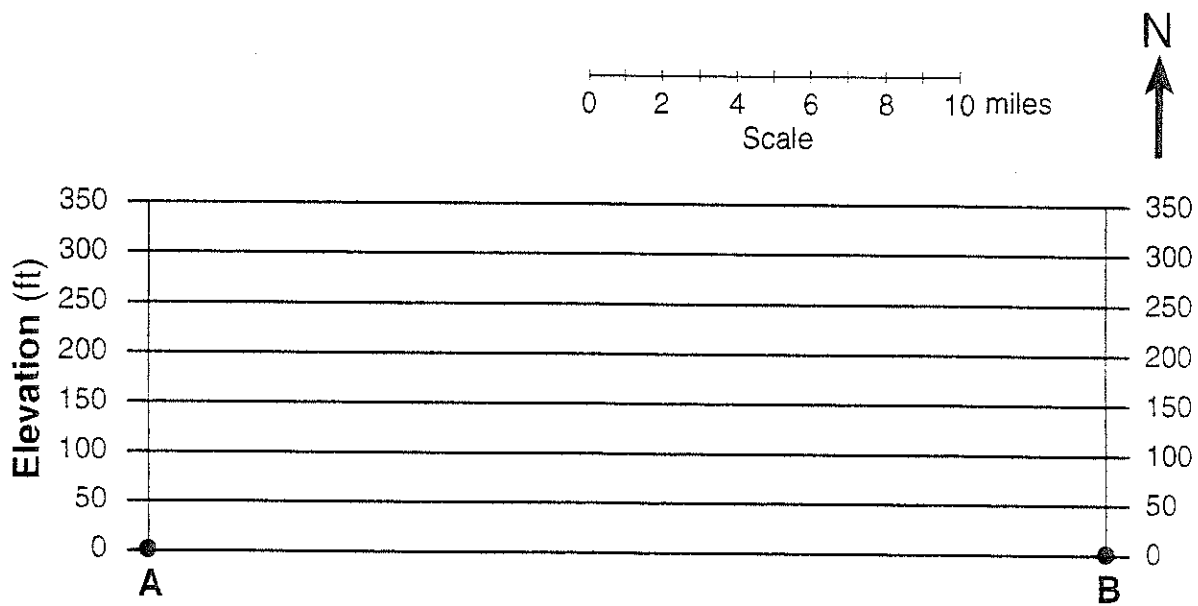
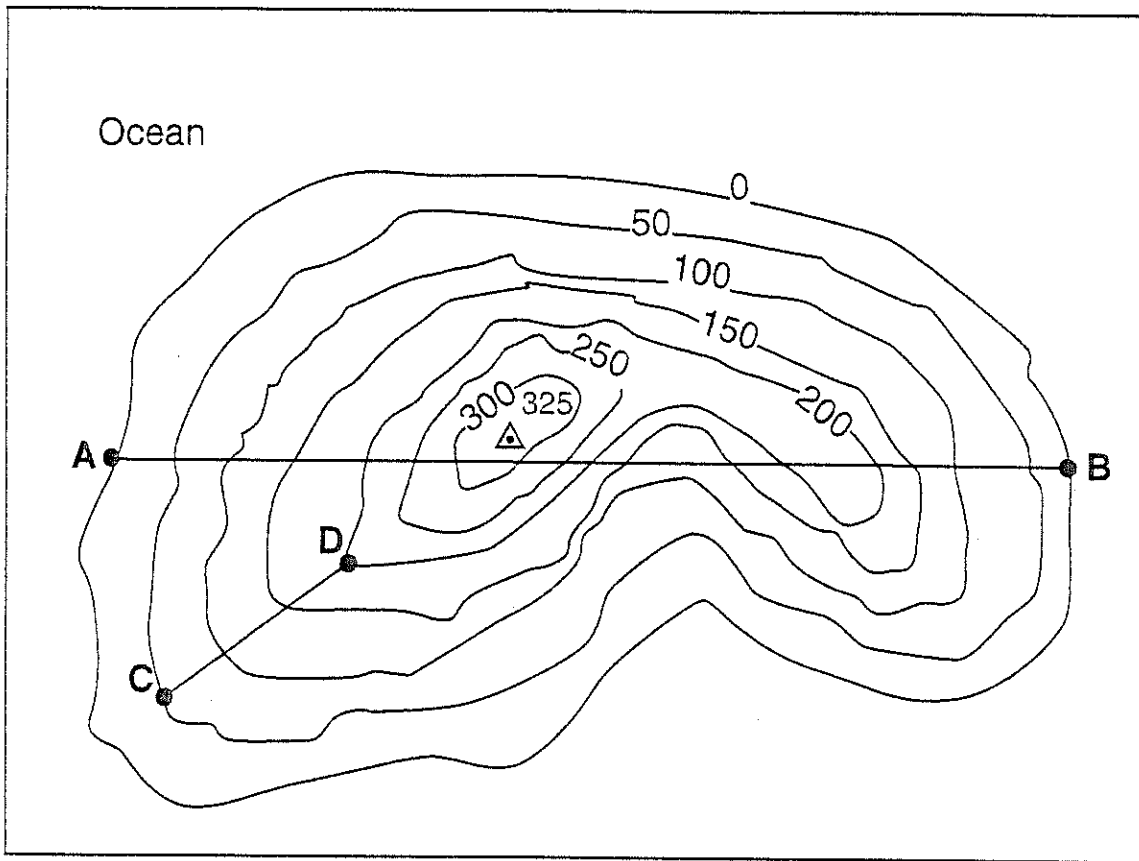
3. What is the highest possible elevation of Girard Hill? _____
4. Determine the gradient between points A and B. _____
5. Create a profile between points C and D



NAME: _____

SOME PRACTICE PROFILES (AND GRADIENTS)

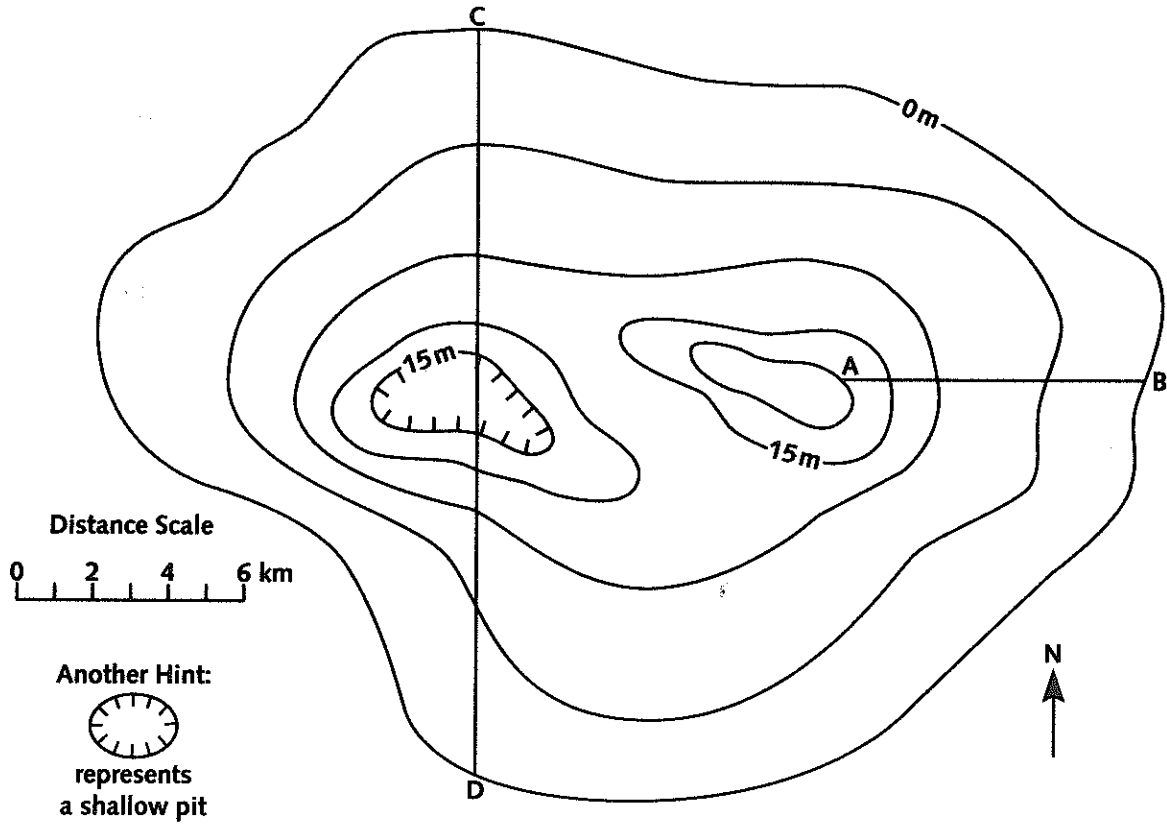
Base your answers to questions 1 and 2 on the topographic map of an island shown below. Elevations are expressed in feet. Points A, B, C, and D are locations on the island. A triangulation point shows the highest elevation on the island.



On the grid provided above, construct a topographic profile representing the cross-sectional view between point A and point B, following the directions below.

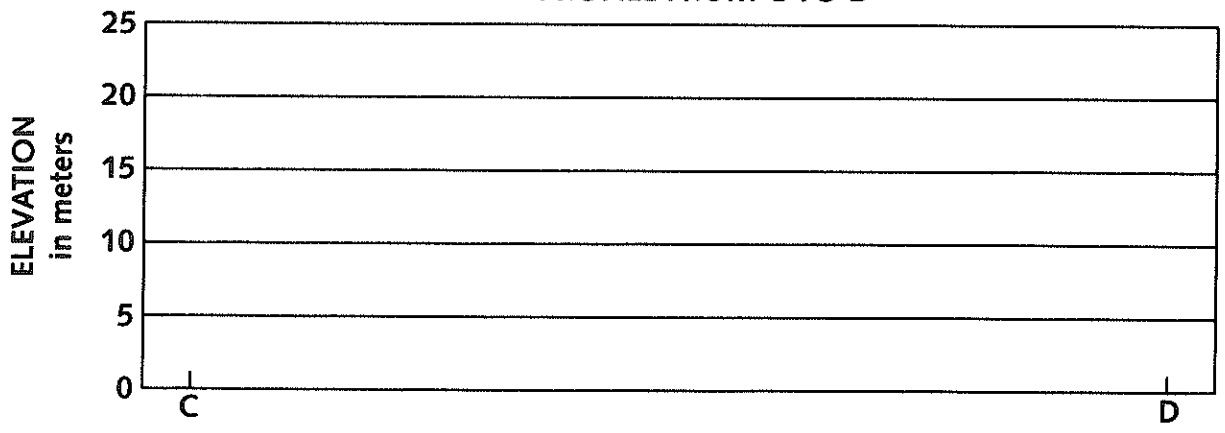
PRACTICE ▶ Working with Topographic Maps

Directions: Answer the questions below based on information from the map.

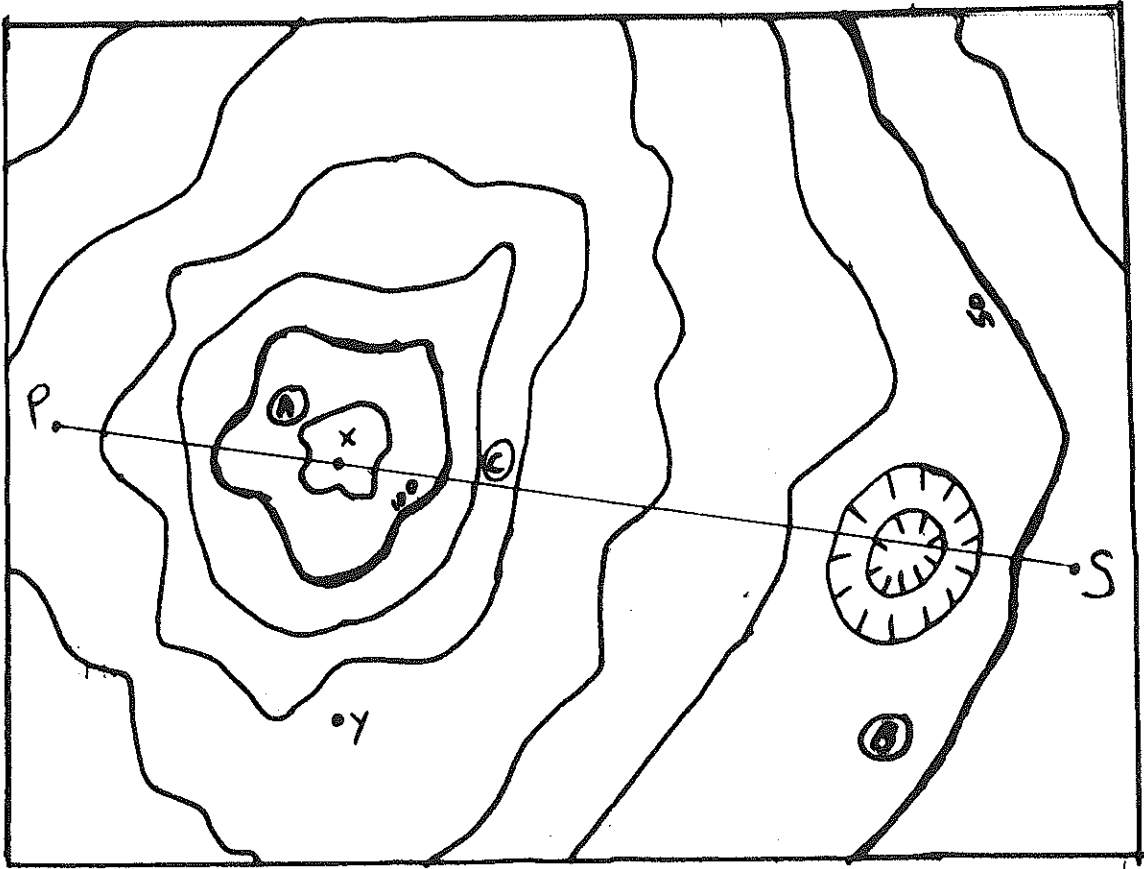


- 1 What is the gradient of the slope between point A and point B?
- 2 Construct a profile of this map from point C to point D.

PROFILE FROM C TO D

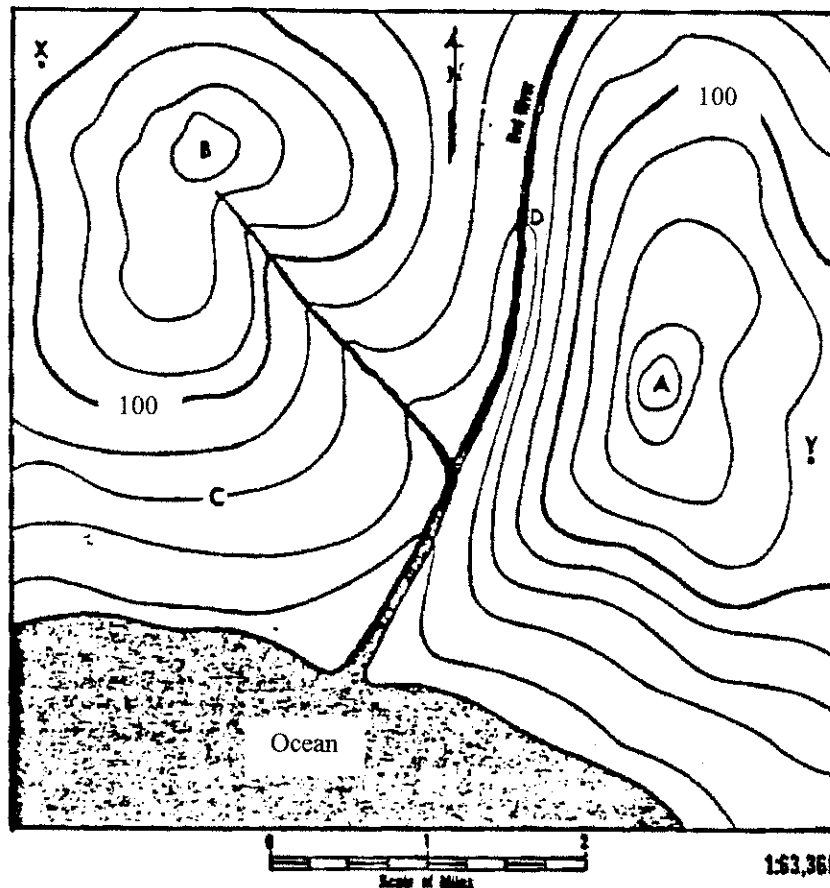


Constructed-Response Questions



Name: _____ Period: _____

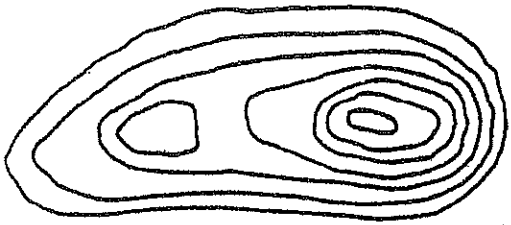
Red River Contours



1. What is the contour interval of this map? Assume elevation in feet*
2. Number all the contour lines.
3. What is the scale of miles of this map?
4. By means of the scale, measure the distance from the top of hill B to the top of hill A.
5. Which side of hill A has the steepest slope?
6. How can you tell whether a land form has steep or gentle slopes?
7. In what direction from hill A is hill B?
8. What is the elevation above sea level of hill A?
9. a) Which of the two hills is higher? b) How much higher?
10. If you climbed to the top of hill B from C, how many feet would you climb?
11. In what direction is the Red River flowing? How do you know?
12. Shade the area on the map which would be under water if the sea level rose 40 feet.
13. Calculate the gradient of the Red River from point D to the ocean.

Name _____
Date _____

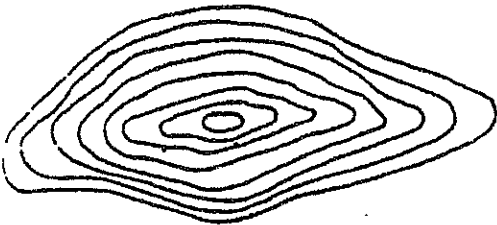
Teacher: _____
Earth Science - Period _____



1 _____



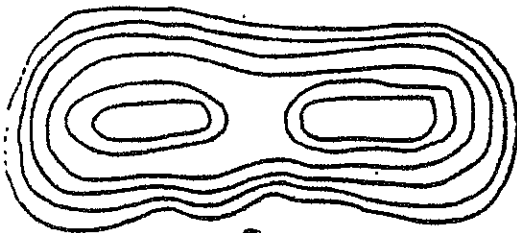
A



2 _____



B



3 _____



C



4 _____



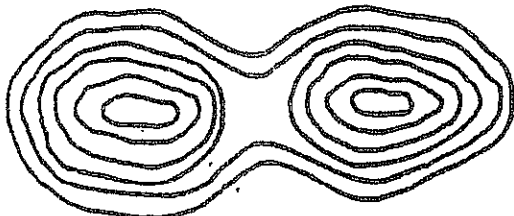
D



5 _____



E



6 _____



F