Topographic Profile Lab

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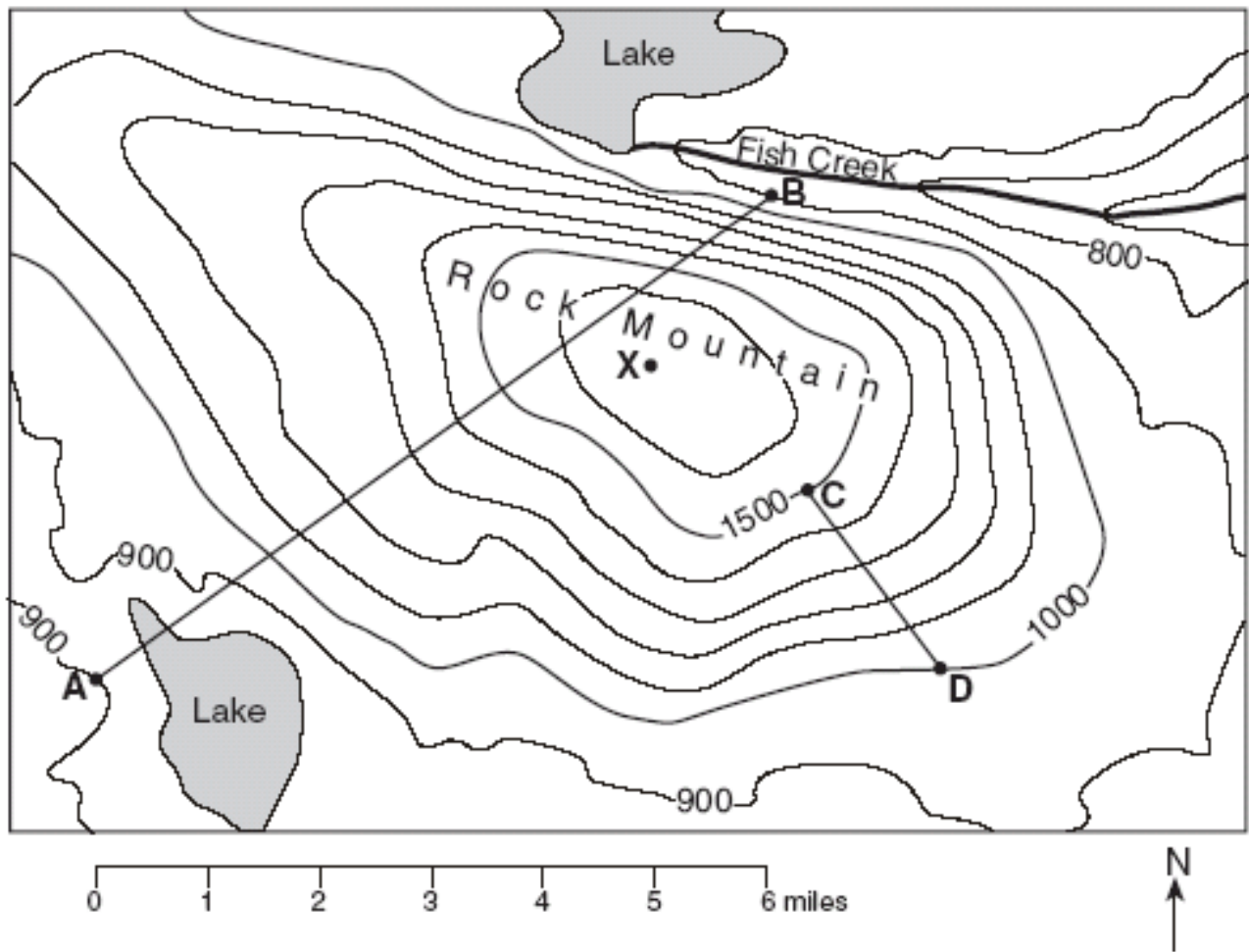
1. What is the elevation of each of the following points?

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

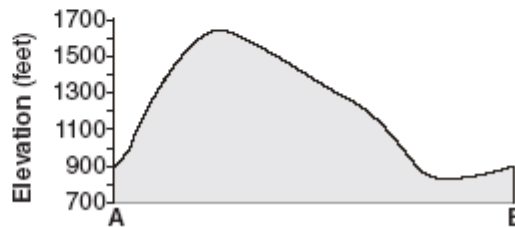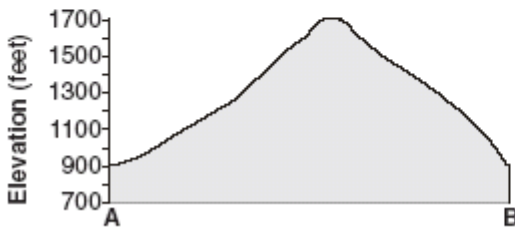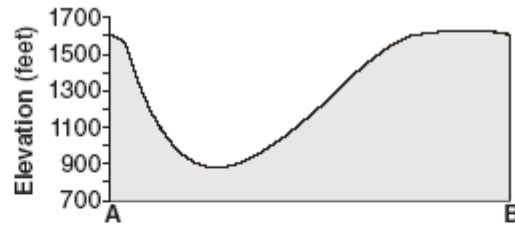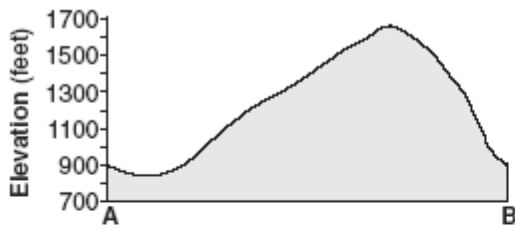2. What is the contour interval of this map? _____

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.? _____

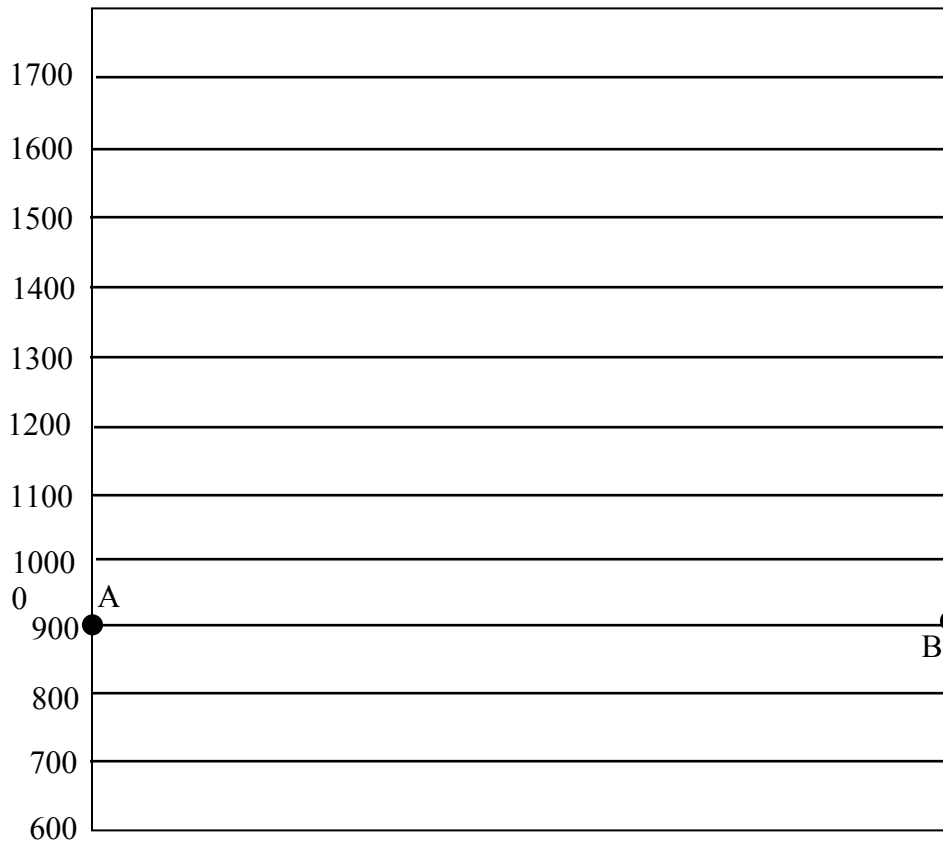6. Which cross section best represents the profile along straight line *AB*?

(1)

(3)

(2)

(4)

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

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

Text

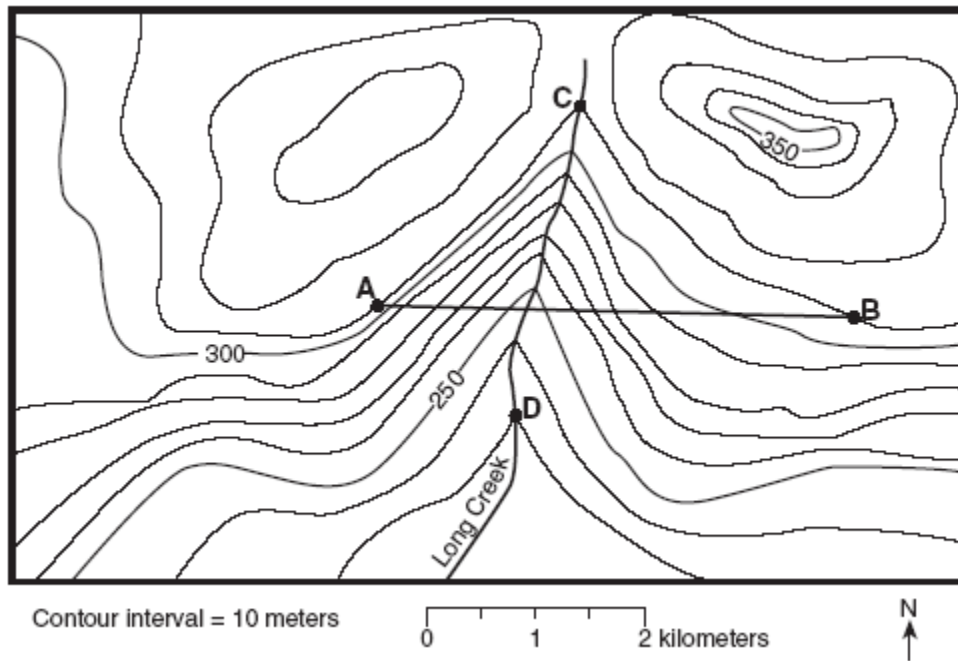9. On the grid, construct a topographic profile from point *A* to point *B* by following the directions below.

a. Plot the elevation along line AB by marking with an **X** each point where the 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 Map Worksheet #2

Contour interval = 10 meters

0   1   2 kilometers

N

64 On the grid below, construct a topographic profile along line *AB*, by plotting a point for the elevation of *each* contour line that crosses line *AB* and connecting the points with a smooth, curved line to complete the profile. [2]

Profile Along Line AB

320
310
300
290
280
270
260
250
240
230
220

Elevation (meters)

A   B

Distance (km)
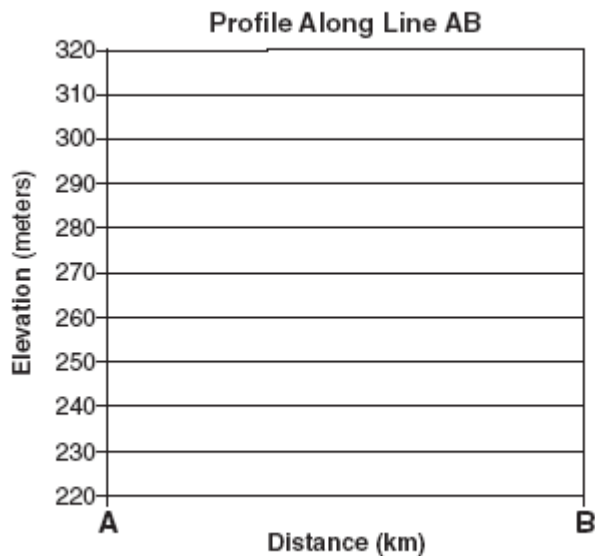
65. Calculate the gradient between C and D:

Topographic Map Worksheet #3

Base your answers to questions 51 through 54 on the topographic map below. Points *A, B, Y*, and *Z* are reference points on the topographic map. The symbol 533 represents the highest elevation on Aurora Hill.

Contour Interval 10 feet
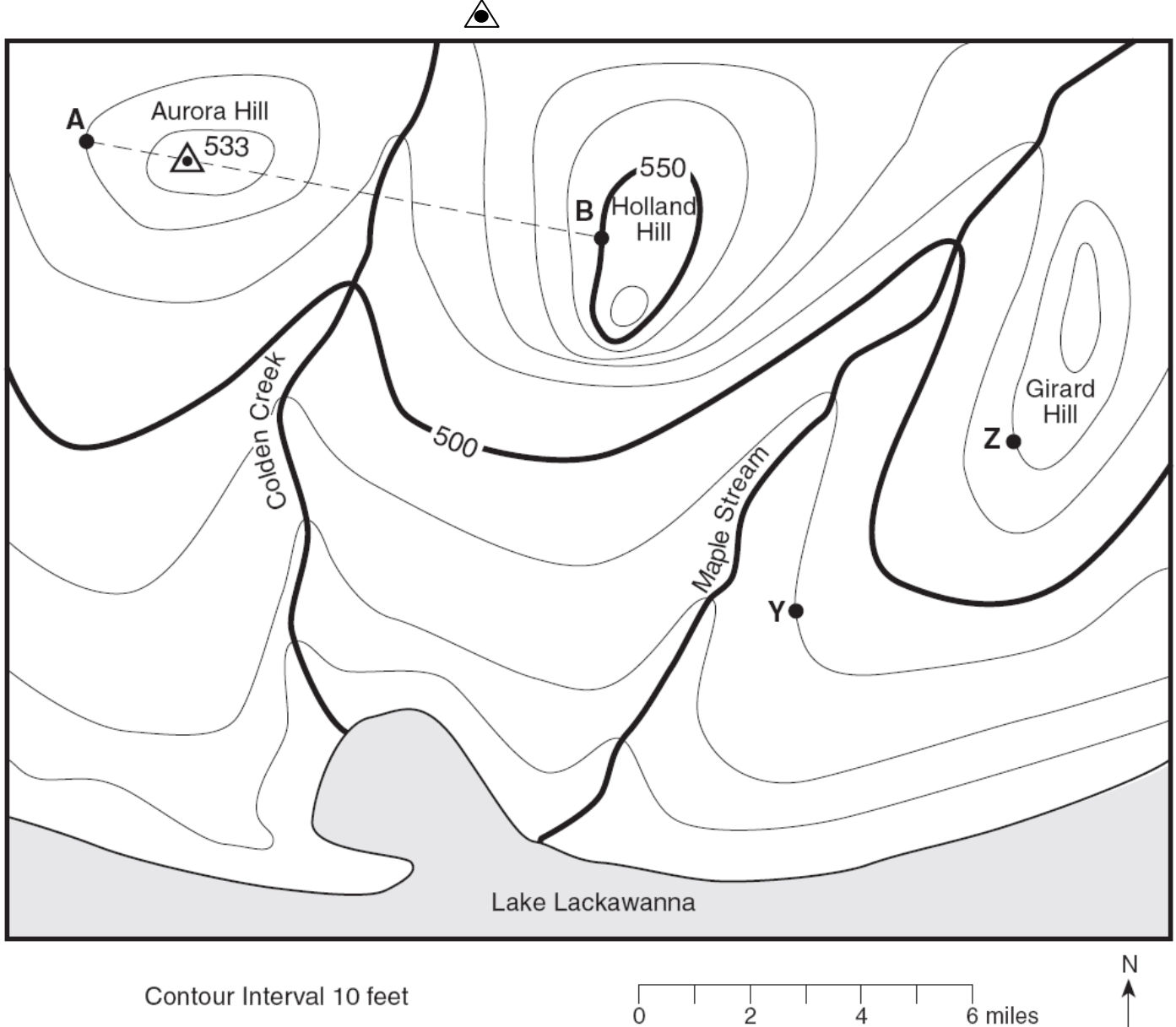
51 State the general compass direction in which Maple Stream is flowing. [1]

52 Calculate the gradient between points *Y* and *Z* on the map, and label the answer with the correct units. [2]

53 Describe the evidence shown on the map that indicates that the southern side of Holland Hill has the steepest slope. [1]

54 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 an **X** *each* point where a contour line is crossed by line AB. Points A and B have been plotted for you. [2]

b Complete the profile by correctly connecting the plotted points with a smooth, curved line. [1]