

NAME _____

SCORE _____

EXERCISE 3 MAPPING EQUAL VALUES

ISOLINES

Isolines are lines on maps that connect data points of equal value. Isolines on maps are named after the type of data that the isolines connect. Isoline maps that connect places of equal ground elevation are called contour maps. Isoline maps that connect data points of equal temperature are called isotherm maps.

ISOLINE MAP CONSTRUCTION

The first decision to be made in constructing an isoline map is selecting an appropriate interval spacing value. The spacing value of isolines will depend upon the range of the data values. For example, if the range of data is tightly packed (small) one may select a spacing value of 5, if the range of data data is loosely packed (large) one may select a spacing value of 20. When constructing the map one can start from either the lowest value and work upward to the highest value, or start at the highest value and work downward to the lowest value.

There are certain rules that must be followed when constructing an isoline map. The following is a list of these rules:

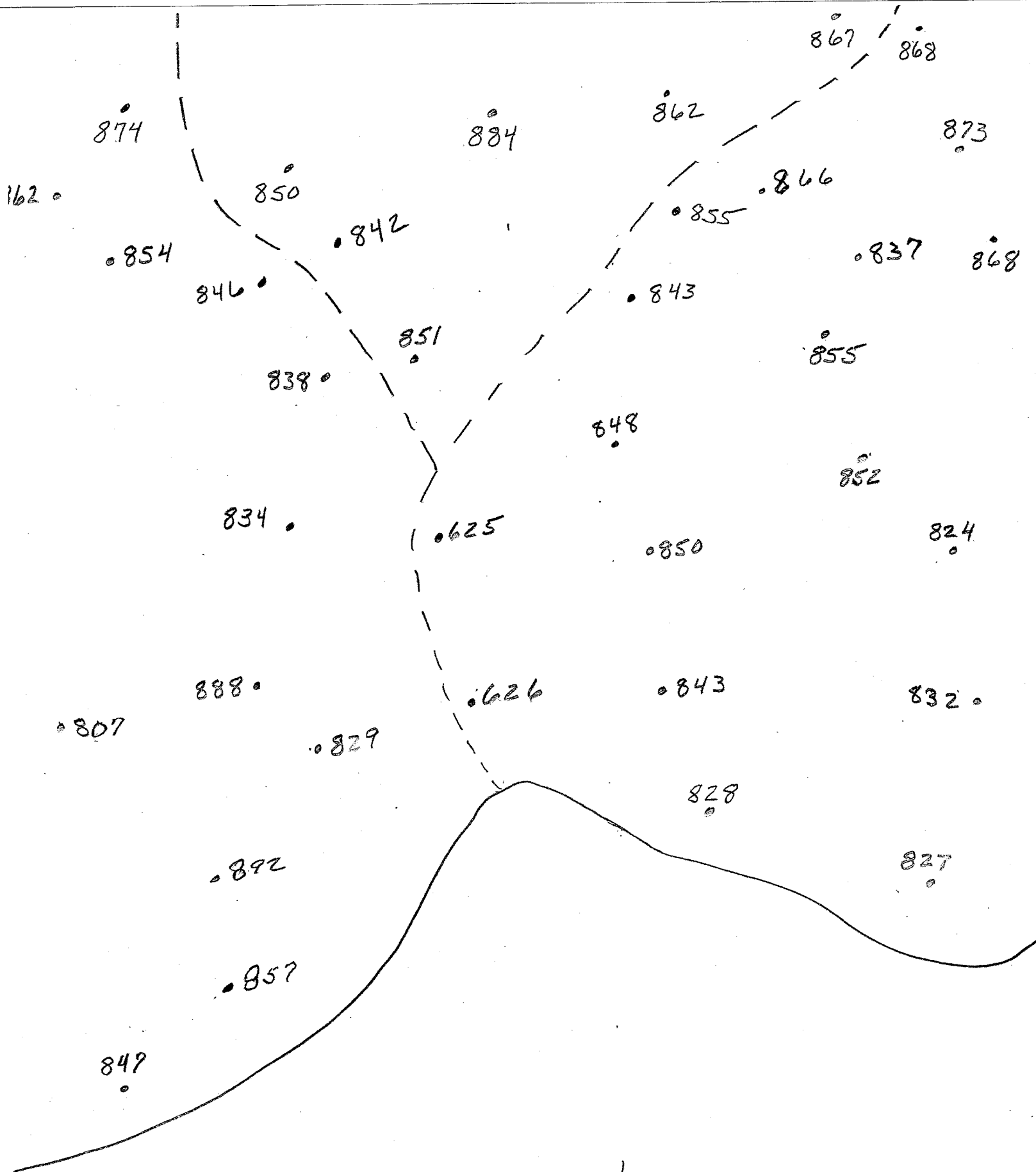
- a) an isoline must never divide
- b) an isoline must never end
- c) an isoline must represent only one value
- d) an isoline must never intersect another isoline
- e) when isolines cross streams they form a V pattern with the apex of the V pointing upstream
- f) close spaced isolines indicate steep slopes, wide spaced isolines indicate gentle slopes.
- g) Concentric circles of isolines indicate a hilltop or mountain peak.
- h) Concentric circles of hachured isolines indicate a hollow or closed depression.

Exercise 3 map 1

This map is an isoline map that is called a contour map as the isolines on this map connect places of equal ground elevations. Construct a contour map using the data points shown on the map and a contour interval of 10 feet.

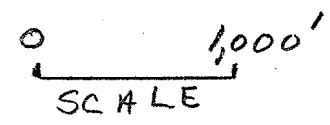
Exercise 3 map 2

This map is an isoline map that is called an isotherm map because it connects points of equal air temperatures. Construct an isotherm map using the data points shown on the map and an interval of 4 degrees.



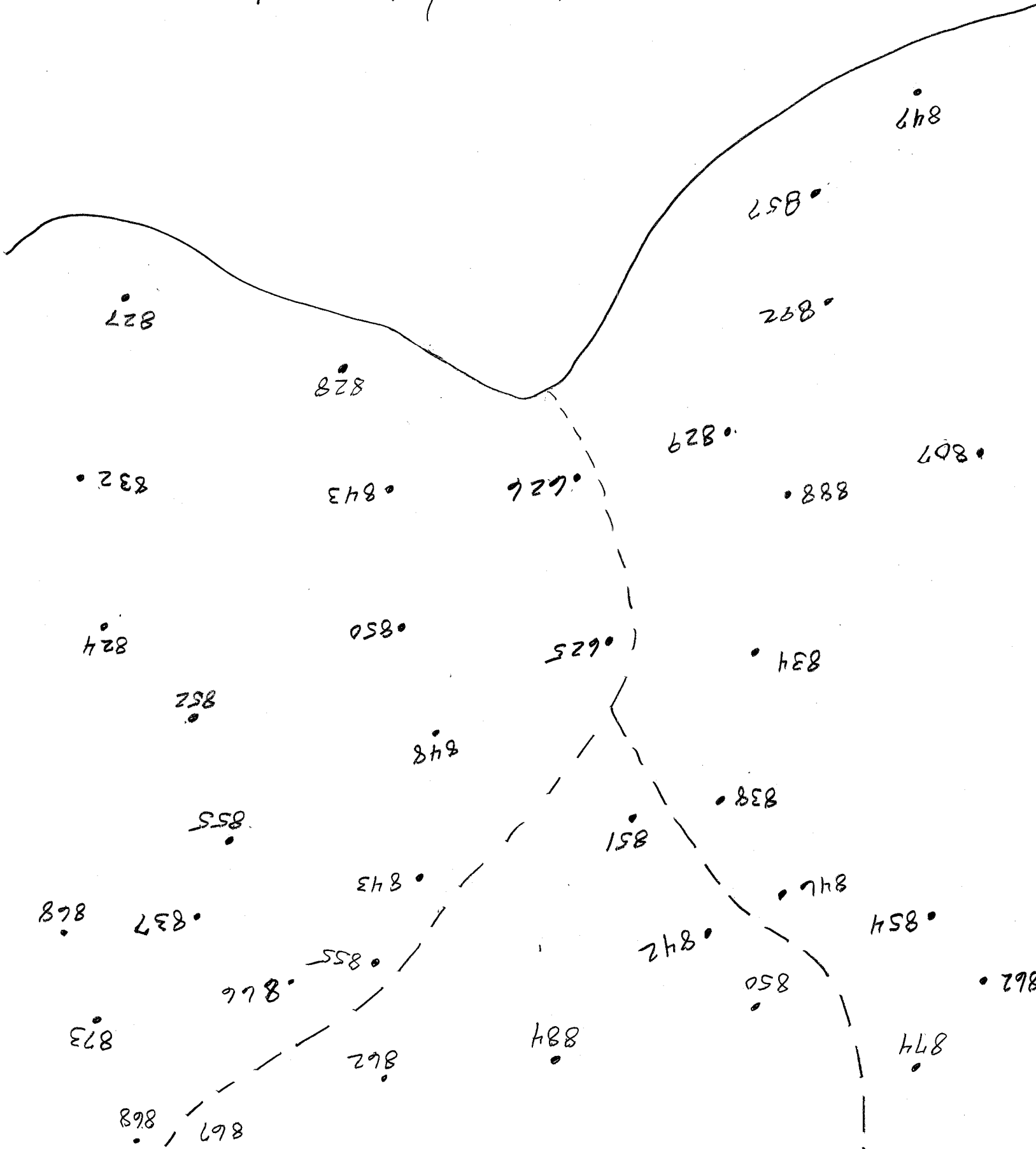
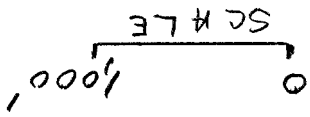
BLUE LAGOON
(820 FT)

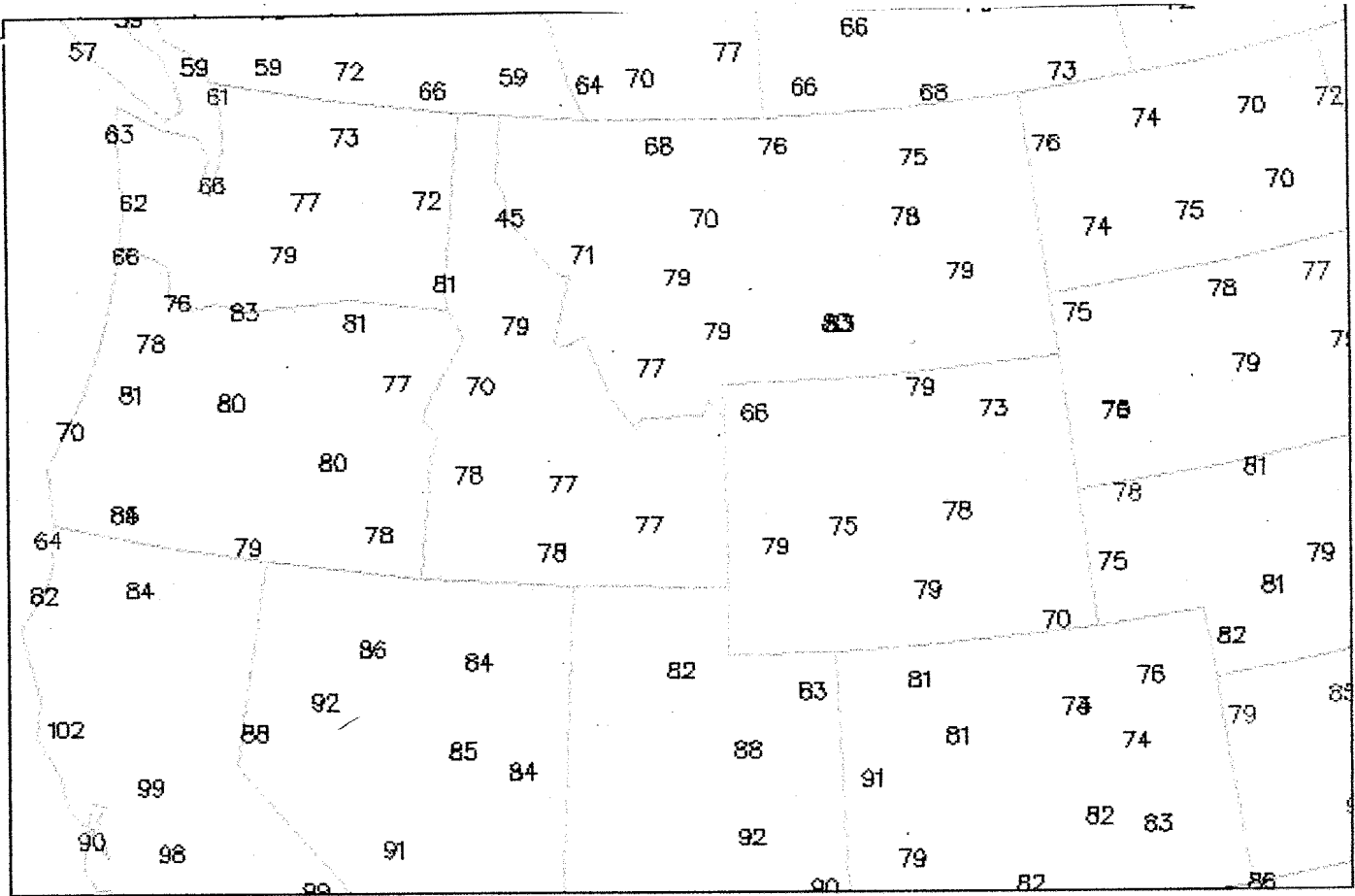
EXERCISE 3 MAP 1



BLUE LAGOON

(820 FT)





EXERCISE 3 MAP 2

