

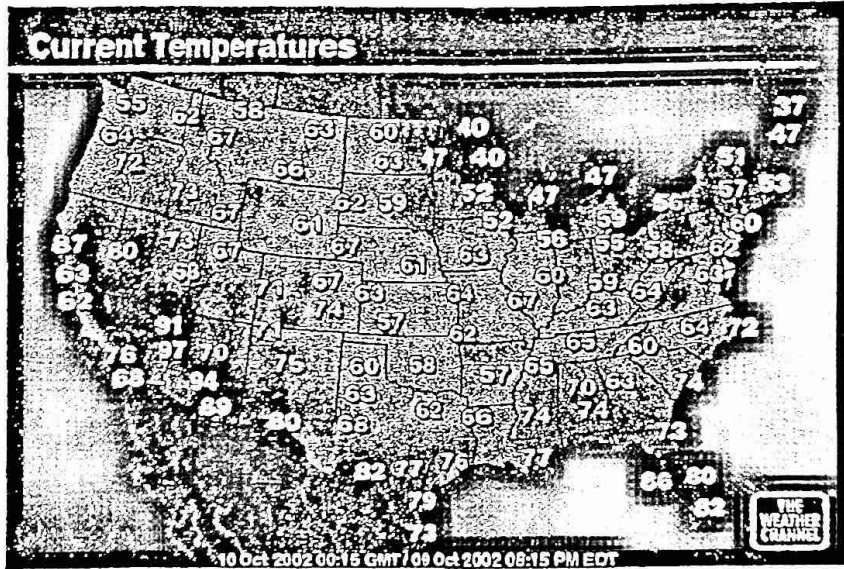
Drawing Isolines Practice

Field Maps are Maps in which field quantities are measured.

- These field values can be Temperature, Air Pressure, Elevation, Humidity, etc.

In order to make these maps easier to understand, lines are drawn to separate groups of temperatures.

For example, in the weather map shown, temperatures are given and the map is color coded by groups of temperatures.

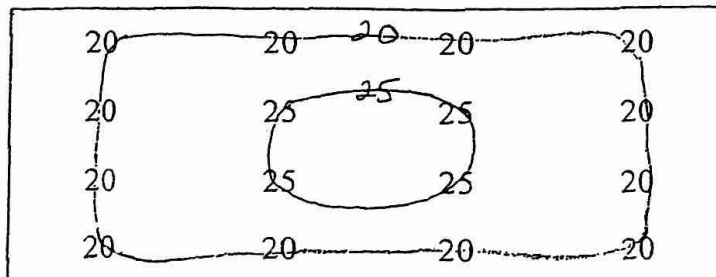


In a field map, lines can be drawn to connect points that have equal temperatures. These lines are called isolines.

The following is a map of 12 cities and their temperatures:

20	20	20	20
20	25	25	20
20	25	25	20
20	20	20	20

If you were to connect the points that had equal temperatures it would look like the following:

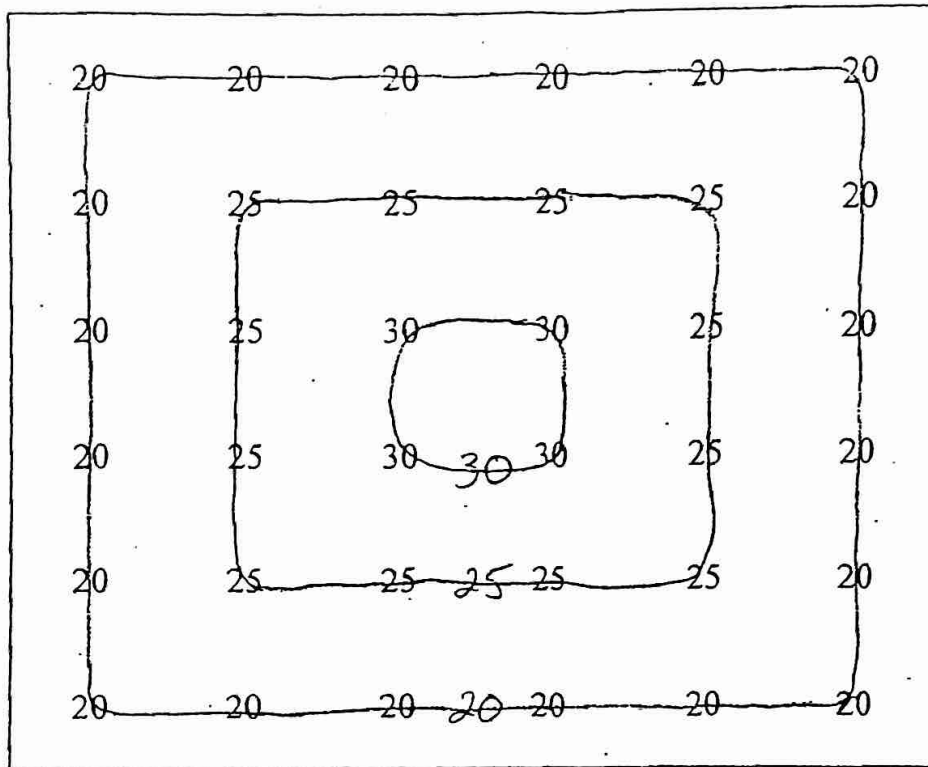


Try to connect the points of equal temperature in the following map:

Draw the 20° C, 25° C, and 30° C Isolines

20	20	20	20	20	20
20	25	25	25	25	20
20	25	30	30	25	20
20	25	30	30	25	20
20	25	25	25	25	20
20	20	20	20	20	20

The map should look like the following:

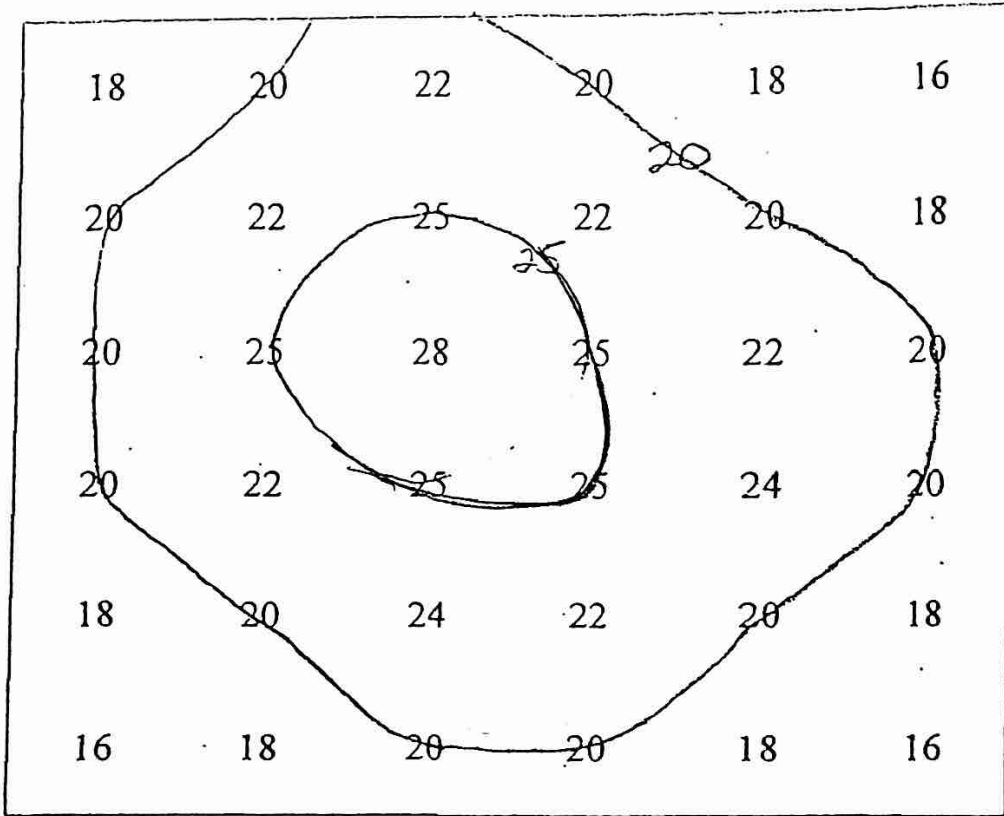


Try this one:

Draw the 20° C and 25° C Isolines

18	20	22	20	18	16
20	22	25	22	20	18
20	25	28	25	22	20
20	22	25	25	24	20
18	20	24	22	20	18
16	18	20	20	18	16

The answer:



Drawing Isolines 2

Field Maps are Maps in which field quantities are measured.

These field values can be Temperature, Air Pressure, Elevation, Humidity, etc.

Sometimes, a map doesn't have perfect numbers to "connect the dots". Look at the small map that follows:

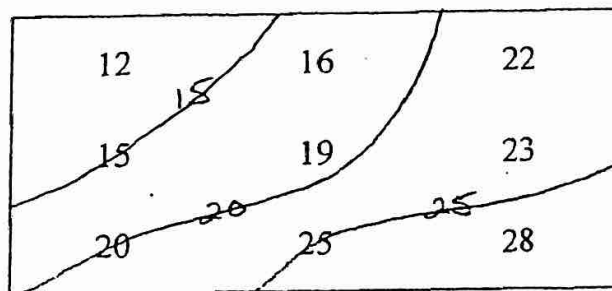
12	16	22
15	19	23
20	25	28

Lets say you want to draw the 15°, 20° and 25° isolines. If these values are temperatures, then we must assume that there would be a gradual increase in temperature from 12° to 16°, therefore, 15° would be found somewhere in the middle. Same thing goes for the 20° isoline.

Between which 2 values would the 20° isoline fall?

If you said between the 19° and 25° or the 19° and 23° or the 16° and 22°, you would be correct.

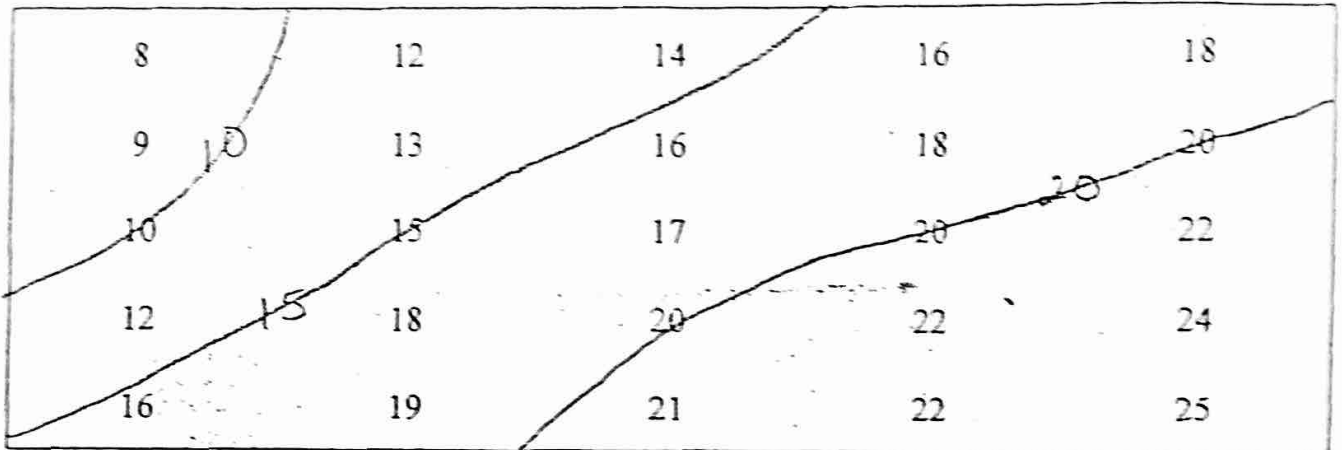
See the following correct map to show you how it's done:



Now try the following: (Draw the 10°, 15° and 20° isolines)

8	12	14	16	18
9	13	16	18	20
10	15	17	20	22
12	18	20	22	24
16	19	21	22	25

Observe the answer:



Here are some important rules about drawing isolines:

1. Always use pencil. You can and usually will make some mistakes.
 2. Isolines never, ever cross.
 3. Isolines are usually smooth gently turning lines. No sharp edges.
 4. Isolines are usually parallel, but do not HAVE to be.
 5. Always label your isolines.
 6. Isolines that connect points of equal temperature are called isotherms.
 7. Isolines that connect points of equal air pressure are called isobars.
 8. Isolines that connect points of equal elevation are called contour lines.
 9. The amount of value between each successive isoline is called the interval. That will be discussed in Drawing isolines 3.
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