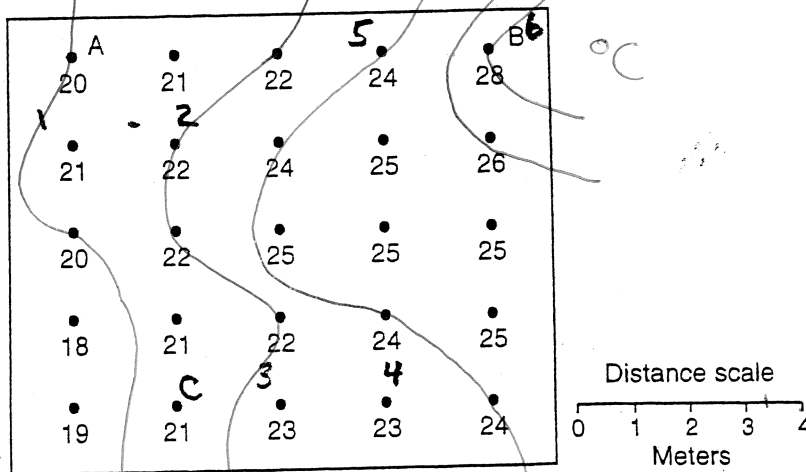


NAME _____

Key

The field map below shows air temperature measurements, in degrees Celsius, taken at the same elevation within a closed room. Two reference points, A and B, are shown.



1. Calculate the gradient between points A and B. (show all work !)

$$\frac{\Delta \text{Field value}}{\text{distance}} = \frac{28^{\circ}\text{C} - 20^{\circ}\text{C}}{7.4\text{m}} =$$

2. Calculate the gradient between points A and C. (show all work)

$$\frac{\Delta \text{Field value}}{\text{distance}} = \frac{21^{\circ}\text{C} - 20^{\circ}\text{C}}{6.5\text{m}}$$

3. On the map above draw in the 20, 22, 24, 26, and 28 degree Isotherms.

4. In between which two points is the gradient the greatest?

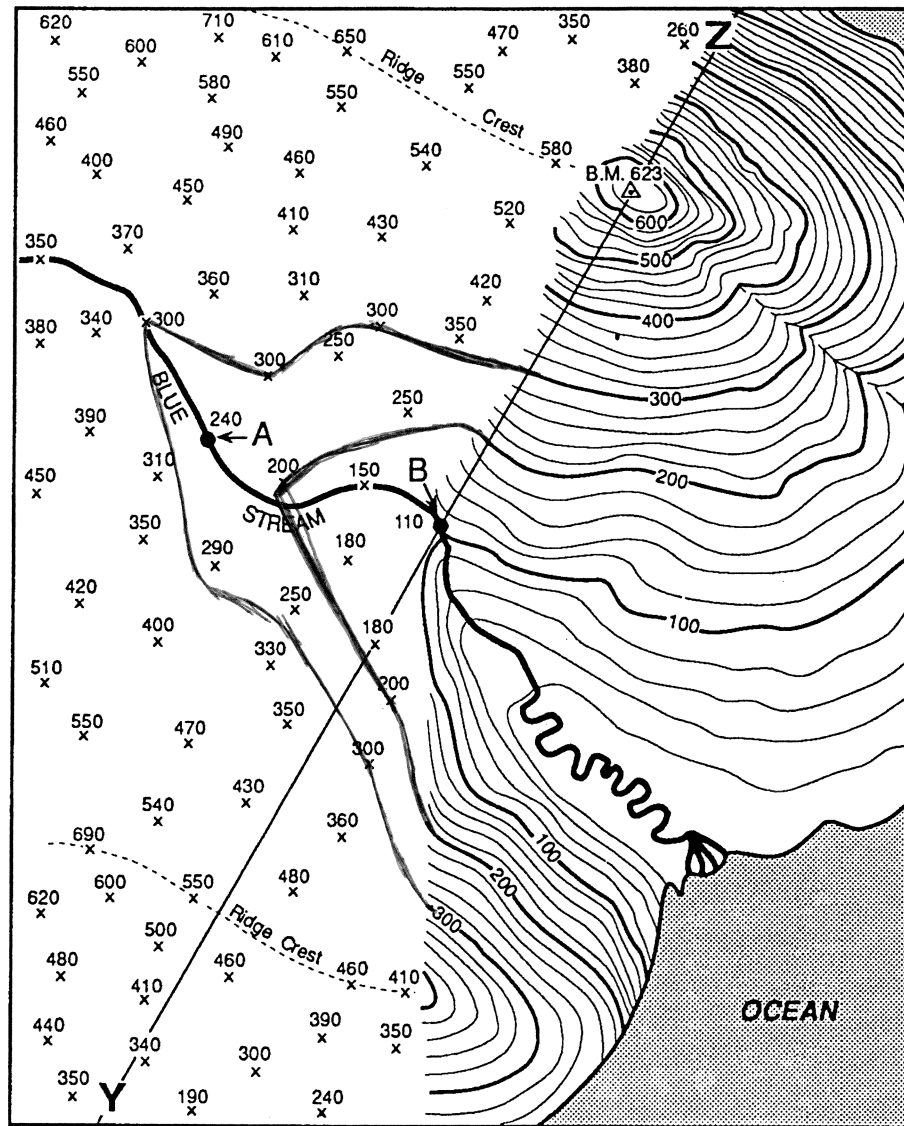
- a. 1 and 2 *
- b. 3 and 4 *
- c. 5 and 6 *

closest isolines

5. What is the relationship between gradient and the spacing between isolines?

As gradient \uparrow spacing \downarrow , the isolines get closer together

6. Base your answer to the following question on the contour map below. Points A, B, Y, and Z are reference points on the map. Note that portions of the map are incomplete.



0 1 2 3 4 5 km CONTOUR INTERVAL = 20 meters NORTH
 SCALE (km) ↑

Continue the 200 and 300 Isolines