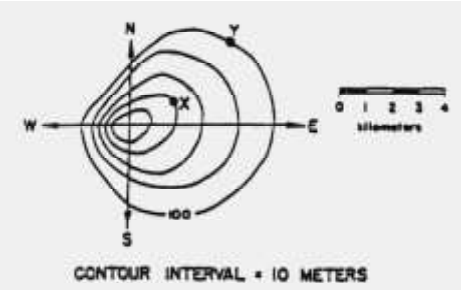
Field Maps and Calculating Gradient

Base yours answers to questions 1 and 2 on the diagram to the right.



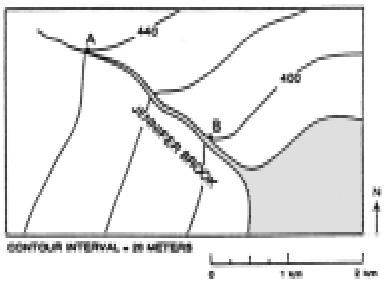
1 On which side of the hill does the land have the steepest slope?

1 north
2 south
3 east
4 west

2. What is the approximate gradient of the hill between points X and Y?
[Refer to the *Earth Science Reference Tables*]

Write Formula, Substitute Data, Calculate Gradient

Base your answers to questions 3 and 4 on the map below.



3. In which direction does the Jennifer Brook flow?

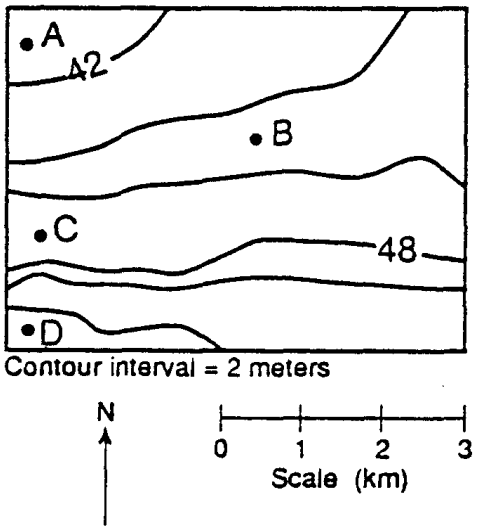
1 southwest
2 northwest
3 southeast
4 northeast

4. What is the approximate gradient, in meters per kilometer, of Jennifer Brook between points A and B?

Write Formula, Substitute Data, Calculate Gradient

5. What is the approximate temperature gradient between points A and B?

Write Formula, Substitute Data, Calculate Gradient



6. A stream in New York State begins at an elevation of 400 meters above sea level and empties into a lake at an elevation of 200 meters above sea level. The stream is 50 kilometers long. What is the gradient of the stream?

Write Formula, Substitute Data, Calculate Gradient

7. A stream begins at an elevation of 2,000 meters and ends in a lake at an elevation of 400 meters. The lake is 320 kilometers from the stream's source. What is the average gradient of the stream?

Write Formula, Substitute Data, Calculate Gradient