

## Problem-Solving Lab

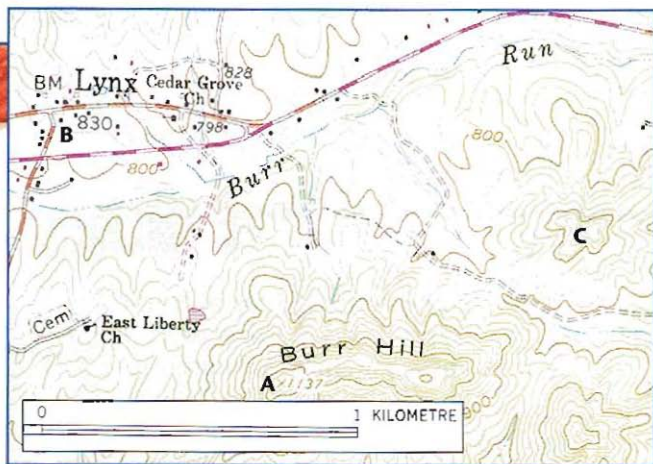
### Calculating Gradients

#### Analyze changes in elevation

*Gradient* refers to the rate of change in the steepness of a slope. To measure gradient, divide the change in elevation between two points on a map by the distance between the points. Use the map to answer the questions; convert your answers to SI.

#### Analysis

1. Use the map scale and a ruler to determine the distance from point A to point B. Record the change in elevation between the two points.
2. If you were to hike this distance, what would be the gradient of your climb?



#### Thinking Critically

3. Calculate the gradient from point B to point C. Would it be more difficult to hike from point A to point B, or from point B to point C? Explain.
4. Between point A and point C, where is the steepest part of the hike? How do you know?