

Cross Sectional View of a Topographic Feature

Part 6 in a Series
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The last article in our series (the Fall 2003 issue) explained features of topographic maps. If you now understand those principles you may be interested in converting that information into a side or cross sectional view. Most of you will be able to look at a topographic map and visualize what the terrain would look like as viewed from the side or the viewpoint of a traveler. Others may not. In either case, it may be interesting to plot the view for additional study.

The starting point is to take a topo map and draw a straight line between two points. See figure 1. Below that area, construct a graph that includes a scale to accommodate all elevations on your straight line.

To graph the side view of your line, draw a vertical line down from each point where your line intersects a contour line. Extend each line down to the appropriate line on the graph. Connect the dots and that will be a side or cross sectional view of the area along your line.

If you were traveling perpendicular to your line, you can now see the lowest areas or the easiest route of passage. This is a neat exercise but it is more practical to practice mentally visualizing the side view after interpreting the contour lines. ☪

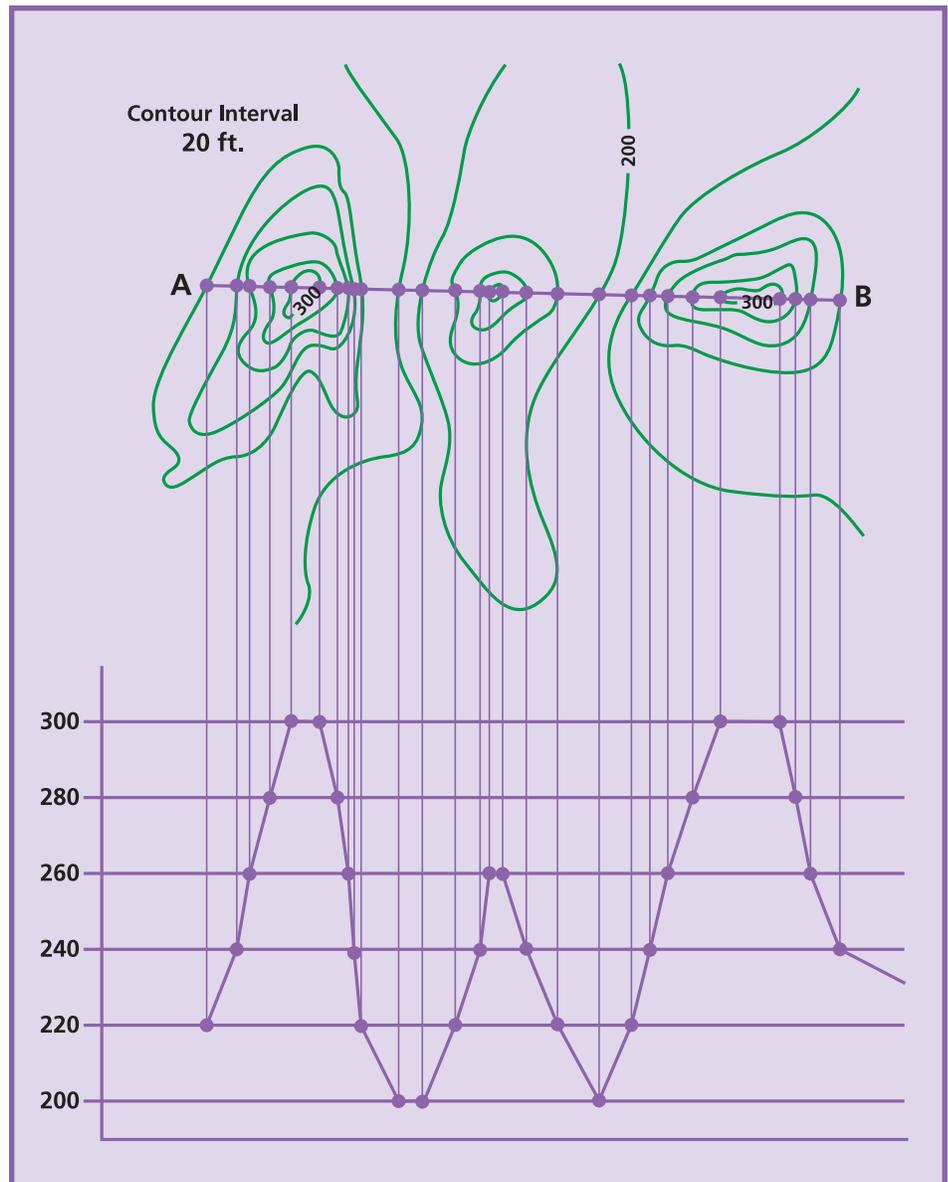


Figure 1 -- Cross Section of Line A-B

Map Distance vs. Ground Distance

Part 7 in a Series by **Douglas A. Smith**
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Previous articles provided information about direction, distance, location, and topography. Another asset to utilizing your map knowledge is the understanding of the relationship between map distance to

ground distance. This is a valuable tool for practical application.

Determine the scale of your map. It is often both explained in text and depicted as a graph bar. Take a ruler and measure the distance between two points on the map. Suppose the map scale was 1" =