

# Reading and Interpreting Topographic Maps

## ~ Key Terms ~

Elevation - A term that describes the height of a point on Earth's surface above (or below) sea level.

Topographic Map - A map that shows the *elevation* of the land, such as hills and valleys, using *contour lines*.

Contour Lines – Lines connecting points of equal elevation. Every point along the line lies at the same elevation above sea level.

Contour Interval - The vertical distance between one contour line and the next. On any map, the contour interval must be constant, and must be shown in the map's legend.

## Rules for Successful Contouring

**Rule #1:** Every point along a contour line represents the same elevation.

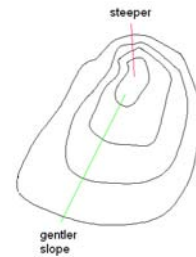
**Rule #2:** Contour lines NEVER split or divide!

**Rule #3:** Contour lines cannot just stop. They must either form a closed loop, or run off the edge of your map.

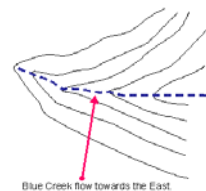
**Rule #4:** Contour lines NEVER, EVER cross

## Tips for Interpreting

**Tip 1:** What does contour line spacing indicate?  
The **closer together** the contour lines are, the **steeper** the hill is.  
The more **spread apart** they are, the **gentler** the slope.



**Tip 2:** Which way is the stream flowing?  
When contour lines cross a stream or river, they form v-shaped kinks in the lines that always point **upstream (uphill)**. Also remember – *Water always flows DOWNHILL!*



**Tip 3:** Finding the hill tops  
Hill tops are easy to find. Just look for the concentric closed contour lines that form the top of a hill.



**Tip 4:** What do those funny hachure marks mean?  
Some features, such as the Grand Canyon, lakes, mines, or sinkholes actually are holes in the ground. The hachured contours indicate a depression. Don't confuse it with a hilltop!

