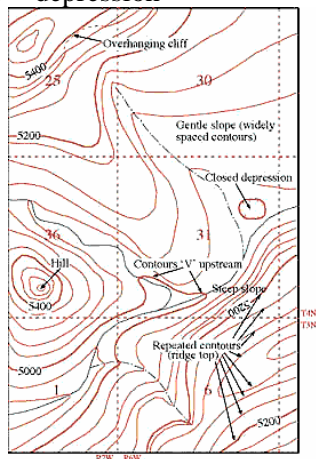


# ORIENTEERING BASICS

1. Finding a Bearing
  - a. Dial N
  - b. Keep compass close to body
  - c. Turn entire body until "Red Fred is in the Shed"
  - d. Try different bearing
2. Pacing
  - a. Every time you take a step with your left foot counts as '1' (or right foot as preferred)
  - b. Keep paces a normal step for you
  - c. Determine your walking pace for 100 meters: \_\_\_\_\_
  - d. Determine your running pace for 100 meters: \_\_\_\_\_
3. Reading and using a Topographic Map
  - a. Scale
    - i. Inches/Centimeters (1:20,000 = 1,667 feet/200 meters; 1:24,000 = 2,000 feet/240 meters; 1:25,000 = 2,083 feet/250 meters)
  - b. The closer the lines, the steeper the slope
  - c. Dashes or Hachure = depression



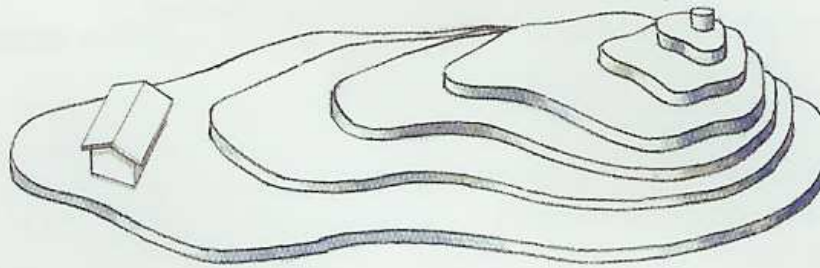
- d. Measure distance between points
  - e. Find the bearing: set side of compass between two points, line up grid, red Fred, double-check correct direction.
4. Sighting
    - a. Dial in your bearing
    - b. Pick a landmark in that direction
    - c. Count your paces until you reach the first landmark
    - d. Re-shoot your bearing
    - e. Continue to the next landmark
  5. Orienteering practice
    - a. Direction: \_\_\_\_\_ Yards: \_\_\_\_\_
    - b. Direction: \_\_\_\_\_ Yards: \_\_\_\_\_
    - c. Direction: \_\_\_\_\_ Yards: \_\_\_\_\_
    - d. Direction: \_\_\_\_\_ Yards: \_\_\_\_\_
    - e. Direction: \_\_\_\_\_ Yards: \_\_\_\_\_

# ORIENTEERING BASICS

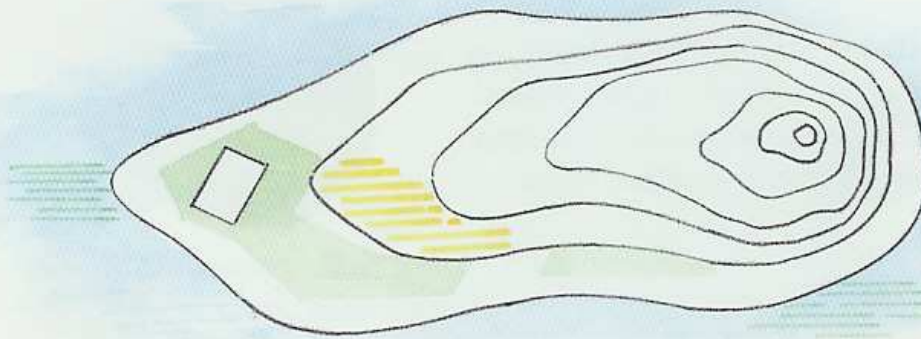
## TOPO MAP READING FOR COMPETITION



*The Landscape*



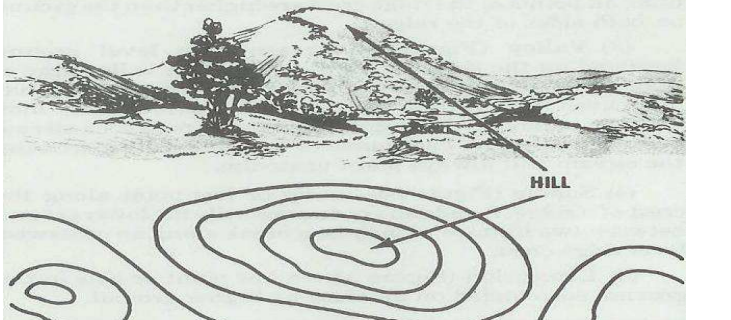
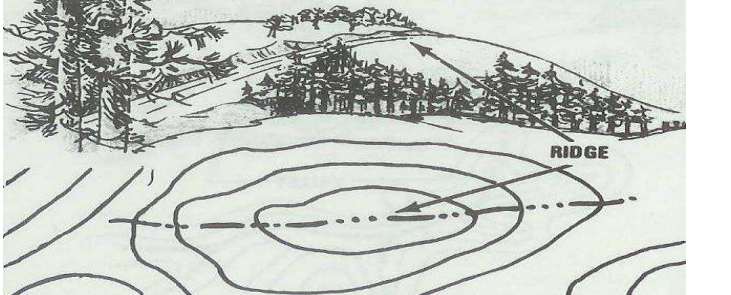
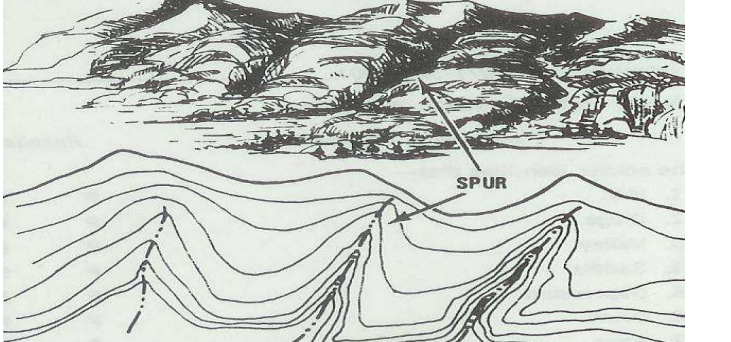
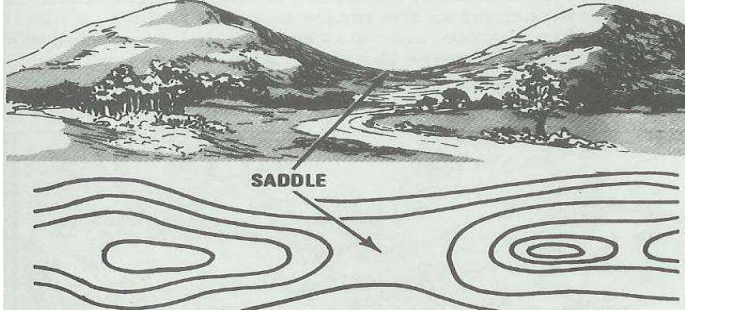
*A Relief Model*




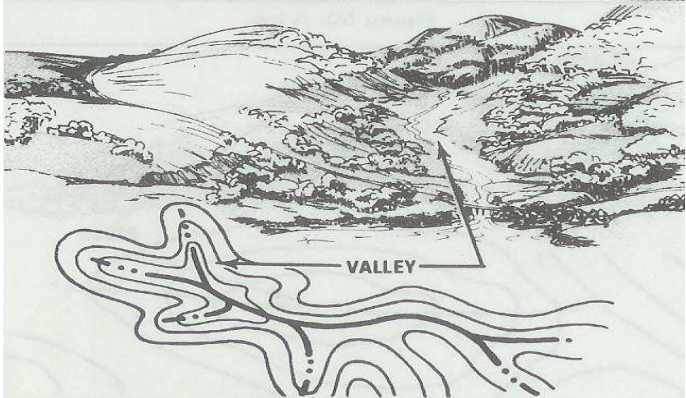
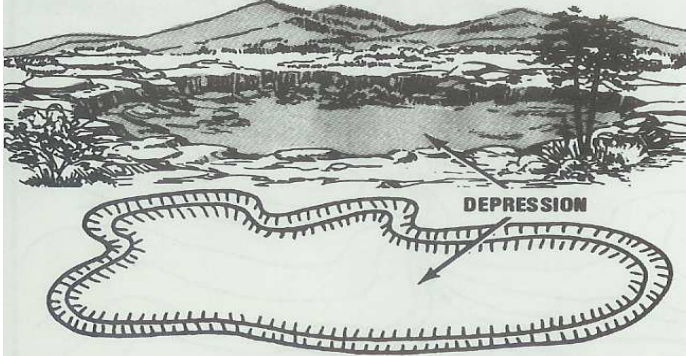
*Contour Lines*

# ORIENTEERING BASICS

## TOPO MAP READING FOR COMPETITION

<p><b>Hill:</b></p> <p>A point or small area of high ground. When you are on a hilltop, the ground slopes down in all directions</p>	 <p>The illustration shows a 3D view of a hill with a tree on its peak and an arrow pointing to the word 'HILL'. Below it is a 2D topographic map showing concentric contour lines that close around a central point, with an arrow pointing to the same central point.</p>
<p><b>Ridge:</b></p> <p>A line of high ground with height variations along its crest. All points of the ridge crest are higher than the ground on both sides of the ridge.</p>	 <p>The illustration shows a 3D view of a ridge with trees along its crest and an arrow pointing to the word 'RIDGE'. Below it is a 2D topographic map showing contour lines that form a series of connected peaks, with a dashed line indicating the ridge crest and an arrow pointing to it.</p>
<p><b>Spur:</b></p> <p>A continuously sloping line of higher ground, normally jutting out from a side of a ridge.</p>	 <p>The illustration shows a 3D view of a spur jutting from a ridge with an arrow pointing to the word 'SPUR'. Below it is a 2D topographic map showing contour lines that form a series of peaks, with a dashed line indicating the spur and an arrow pointing to it.</p>
<p><b>Saddle:</b></p> <p>Dip or low point along a crest of a ridge. Not just a low point between two hills.</p>	 <p>The illustration shows a 3D view of a saddle between two hills with an arrow pointing to the word 'SADDLE'. Below it is a 2D topographic map showing contour lines that form a series of peaks, with a dashed line indicating the saddle and an arrow pointing to it.</p>

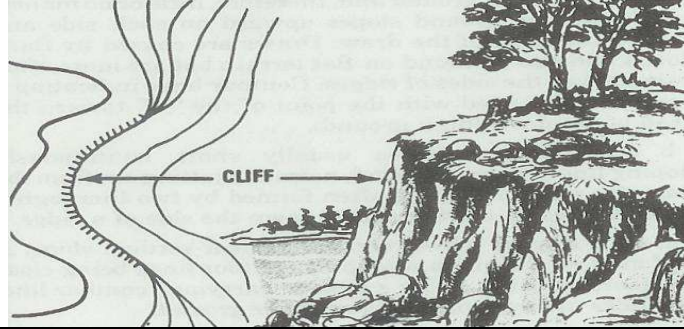
# ORIENTEERING BASICS

<p><b>Draw:</b></p> <p>Ground slopes upward and each side and toward the head of the draw; Typically found along the side of a ridge between spurs. Similar to a valley only no level ground.</p>	 An illustration showing a landscape with a narrow, V-shaped depression labeled 'DRAW'. The depression is formed by a ridge between two spurs. The ground slopes upward on both sides and toward the head of the draw. Below the illustration is a contour map showing the same feature, with contour lines curving inward toward the draw.
<p><b>Valley:</b></p> <p>Reasonably level ground bordered on the sides by higher ground</p>	 An illustration showing a wide, U-shaped valley labeled 'VALLEY'. The valley floor is relatively level, and the sides are bordered by higher ground. Below the illustration is a contour map showing the valley, with contour lines curving outward from the valley floor.
<p><b>Depression:</b></p> <p>Low point or hole in the ground surrounded on all sides by higher ground.</p>	 An illustration showing a circular depression labeled 'DEPRESSION'. The depression is a low point in the ground surrounded by higher ground on all sides. Below the illustration is a contour map showing the depression, with contour lines forming a closed loop with hachures pointing inward.
<p><b>Reentrant:</b></p> <p>Indicated by a slight jutting in on the side of a hill. Similar to a draw only much smaller.</p>	<p>No Illustration Available</p>

# ORIENTEERING BASICS

Cliff:

A vertical or near vertical slope. Shown on a map by either extremely close contour lines or tick marks pointing toward low ground.



Your best tool to help you identify features? Your Fist.

