Contour Lines

Characteristics of contour lines are:

1. Connect point of equal elevation.
2. Always connects close contour lines. This is not always visible on the map.
3. They never cross, split or intersect – at a cliff they might merge.
4. Evenly spaced contour lines indicate a uniform slope.
5. Closely spaced contour lines show a steep slope.
6. Widely spaced contour lines show gentle slope.
7. Uneven spacing – irregular or variable slope.
9. Closed contours with arrow in the centre represent depressions.

Other characteristics of contour lines are:

- Horizontal distance between contour lines is inversely proportional to slope.
- Uniform slopes have uniformly spaced lines.
- Along plane surfaces, contour lines are straight and parallel.
- Contour lines are perpendicular to lines of steepest slopes.
- For summits or depressions, contour lines most close upon themselves.
- A single contour line can not lie between two lines of higher or lower elevation.

There are some basic rules for contour lines:

1. A contour line must never split or divide.
2. A contour line must never simply end, except at the edge of the map.
3. A contour line must represent one and only one elevation.
4. A contour line may never intersect other contour lines. Overhanging cliffs are the only exception.
5. Concentric circles of contour lines indicate a hilltop or mountain peak.
6. Concentric circles of hatched contour lines indicate a closed depression.

Sources:

- Institute of Cartography, ETHZ, Zurich.
- http://www.geology.ewu.edu/geol100/100topo.htm
- http://raider.muc.edu/~mcnaugma/Topographic%20Maps/what_is_a_topographic_map.htm