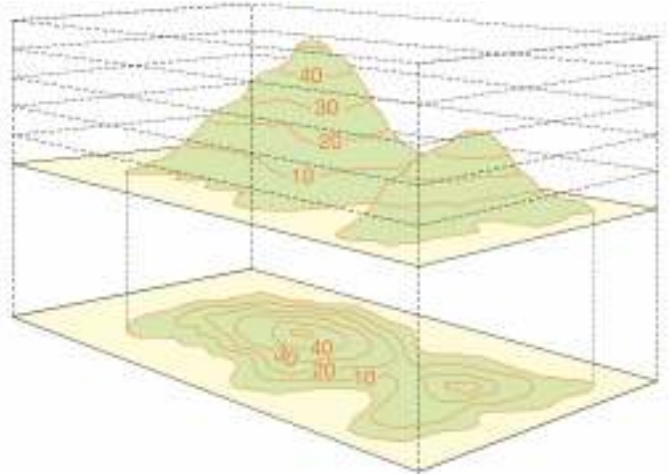


# Relief and Vertical Intervals

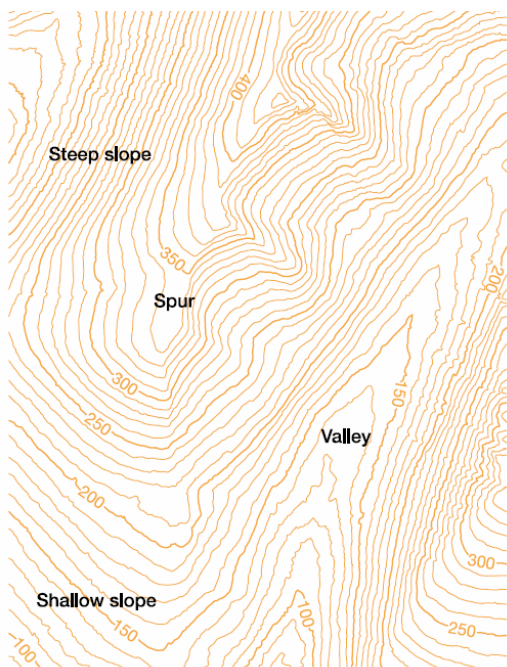
Understanding the shape of the land by looking at a map is a very useful skill and can be essential if you're going to be walking in mountainous terrain. The height and shape of the land is shown on a map using 'contour lines'. These lines appear as thin orange or brown lines with numbers on them. The number tells you the height above sea level of that line.

A contour line is drawn between points of the same height, so any single contour line will be at the same height all the way along its length. The height difference between separate contour lines is normally 5 metres, but it will be 10 metres in very hilly or mountainous areas. The map key will tell you the contour interval used.

The picture to the right illustrates how a landscape can be converted into contour lines on a map. An easy way to understand and visualise contour lines is to think of them as high tide lines that would be left by the sea. As the water level drops it would leave a line every 10 metres on the landscape. These marks would be contour lines.



Being able to visualise the shape of the landscape by looking at the contour lines of a map is a very useful skill that can be developed with practice. It will allow you to choose the best route for your journey. When reading contour lines on a map it's helpful to remember the numbering on them reads uphill. It might be useful to imagine that to read contour line numbers you have to be stood at the bottom of the hill looking up it, otherwise the numbers would be upside down.

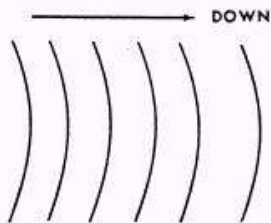
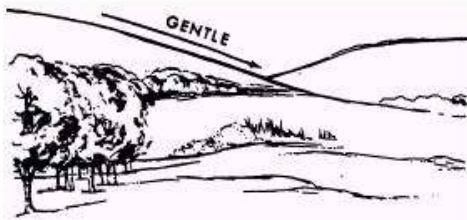


Other useful things to look out for when reading contour lines are rivers, which usually flow into valleys, or areas with very few contour lines, which will be flat.

The picture to the left shows how contour lines can be used on maps to describe different landscapes. Even though all the lines look similar at first, they are describing very different landscape features. The closer together the contour lines, the steeper the slope of the hill. If a hill is very steep the contour lines might even merge into each other.

A spur is a 'V'-shaped hill that juts out. A simple way to tell a valley from a spur when looking at contour lines is to remember that if the 'V' points uphill it's a valley, if it points downhill it's a spur.

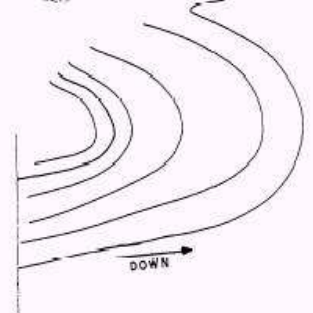
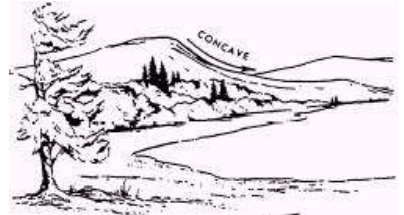
# Types of Slope



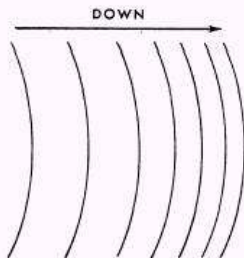
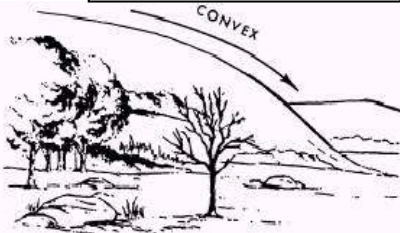
**Gentle Slope**



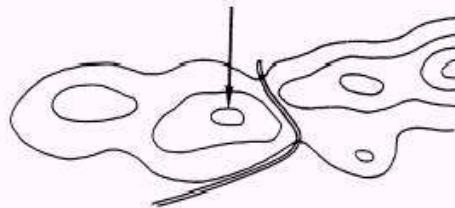
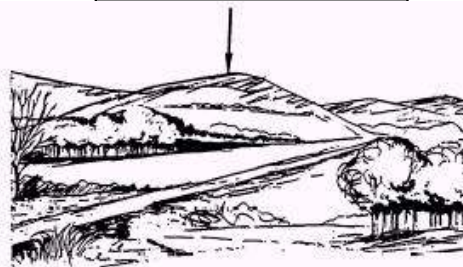
**Steep Slope**



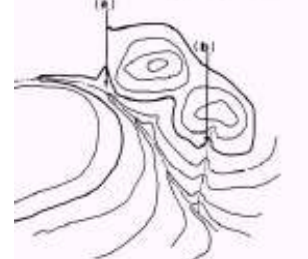
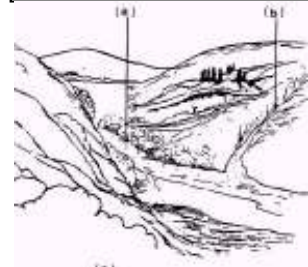
**Concave Hill**



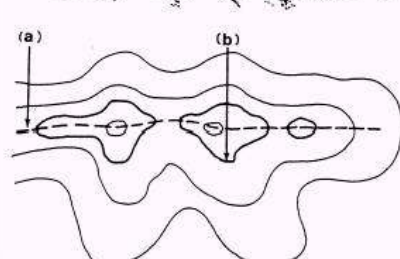
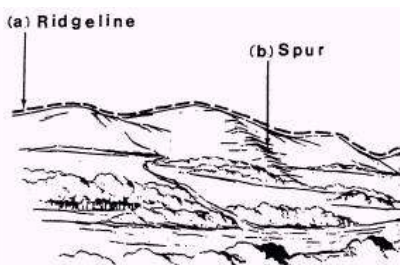
**Convex Hill**



**Hill**



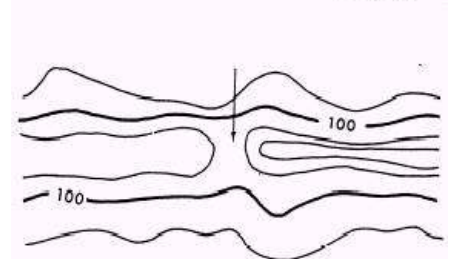
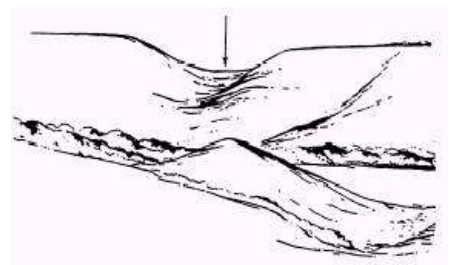
**a) Valley b) Draw**



**a) Ridgeline b) Spur**



**Cliff**



**Saddle**