Relief and contours

How do we show height on maps?

Like any piece of paper, maps are flat, but the land they cover is often quite hilly. Contour lines are a map’s way of showing how high the land is. They join together points of equal height and never cross.

When contour lines appear close together, this means the land slopes sharply and would be steep to climb. The further apart the contour lines are, the flatter the land will be.

If you take some time to look at the contour lines on a map, you will soon get an idea in your mind of what the land actually looks like in real life.

Recognising contour patterns

Contour lines often form distinct patterns that are useful to recognise.

A U-shaped Valley

A V-shaped valley
‘Naismith’s rule’

When you’re travelling across steep landscapes (where contour lines are very close together) it will add time onto your journey.

Naismith said that you should allow an extra minute of walking time for every 10 metres of height that you climb.

Contour lines are usually drawn at 10 metre intervals on a 1:50 000 scale map and at 5 metre intervals on a 1:25 000 scale map.