

TERRAIN

READING TERRAIN FROM CONTOURS

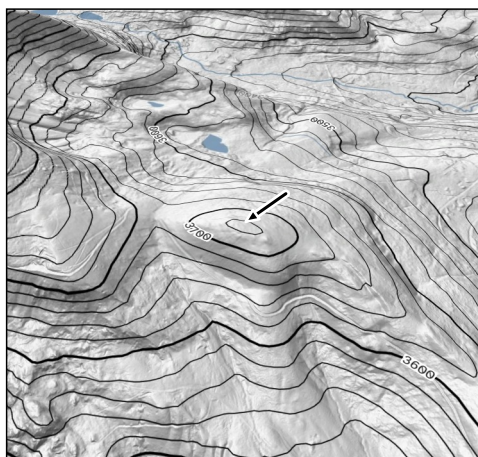
Each example is real terrain from our maps, tilted 45° so you can see its shape: the shading and the contours of a 1:25,000 sheet, drawn black here (brown on the sheets), and nothing else. Tilted, the examples are not to scale; on a printed sheet the same lines lie flat, 1 km to 40 mm.



READING THE LINES

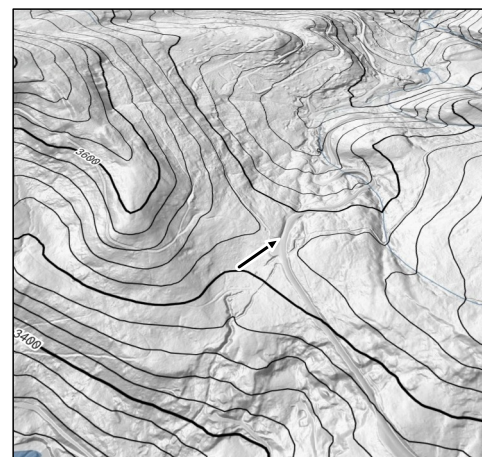
- A contour joins points of equal height. The interval between lines suits the terrain and changes from sheet to sheet: it is printed in the collar. These examples use 20 and 40 m.
- Every fifth line is an index contour: thicker, and numbered. The tops of the numbers face uphill.
- Close lines: steep. Wide apart: gentle. None at all: flat.
- Contours never cross. They stop at water and at roads, which are drawn over them.
- The shading helps: slopes facing away from the light, which comes from the north-west, are darker.

HILL



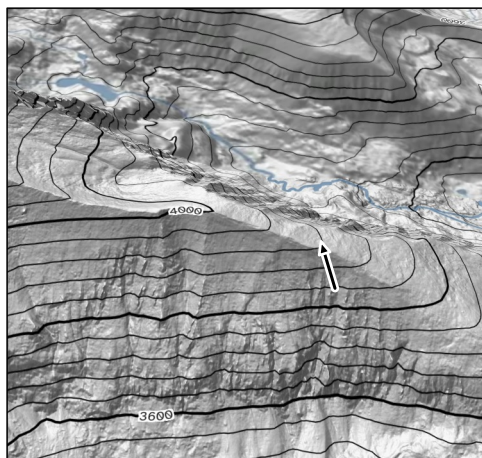
Closed rings around high ground, the smallest at the top: here the 3700 m index ring with the 3723 m top inside. Near Hoosier Pass, Colorado. 20 m interval.

SADDLE



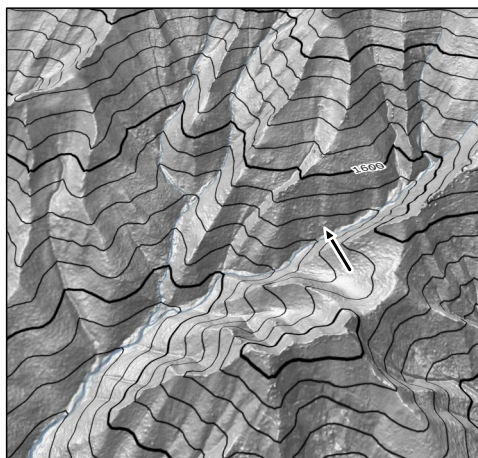
The low point between two higher grounds: the contours bow toward each other like an hourglass. Roads and trails cross here: Hoosier Pass, Colorado. 20 m interval.

RIDGE



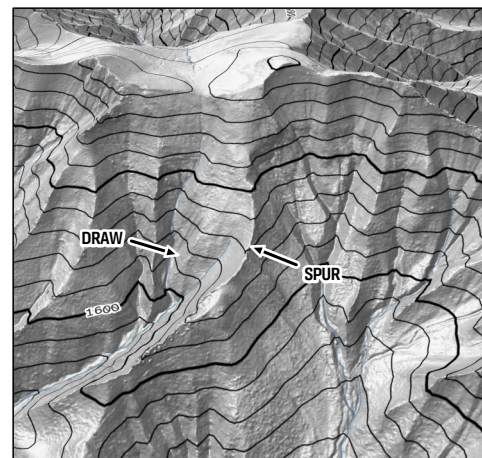
A line of high ground. Contours run along both sides and bend into U shapes pointing down the ridge. Quandary Peak's east ridge, Colorado. 40 m interval.

VALLEY



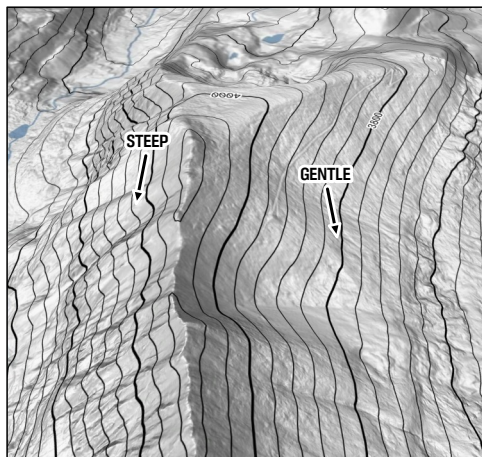
A stream course between higher ground. Where the contours cross the stream they form Vs that point upstream. Trout Branch, Great Smoky Mountains. 40 m interval.

SPUR AND DRAW



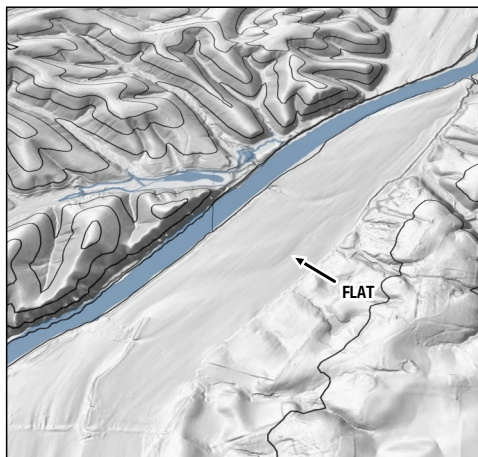
A spur runs down from higher ground; a draw is the shallow valley beside it. Contours make Us pointing down a spur, Vs pointing up a draw. Mount Le Conte, Great Smoky Mountains. 40 m interval.

STEEP, GENTLE, CLIFF



Crowded lines: steep; where they nearly merge, cliffs. Wider spacing: gentler. North Star Mountain, Colorado, looking east along the ridge: cliffs on its north side (left), a gentler south side. 40 m interval.

FLAT GROUND



No contours: the ground changes height by less than one interval. The Duck River floodplain, Tennessee, below steep valley sides. 20 m interval.

DEPRESSIONS AND HEIGHTS

- A sinkhole or pit is a closed ring too, but the ground falls toward its middle. Our sheets do not mark depressions with ticks: read the numbers on the index lines around it, and the shading.
- Heights are printed for named peaks, hilltops, benchmarks (BM) and road junctions: see the legend.
- The five major terrain features: hill, saddle, valley, ridge, depression. The three minor: spur, draw, cliff.