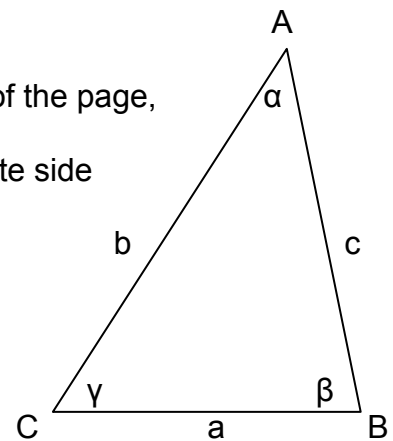
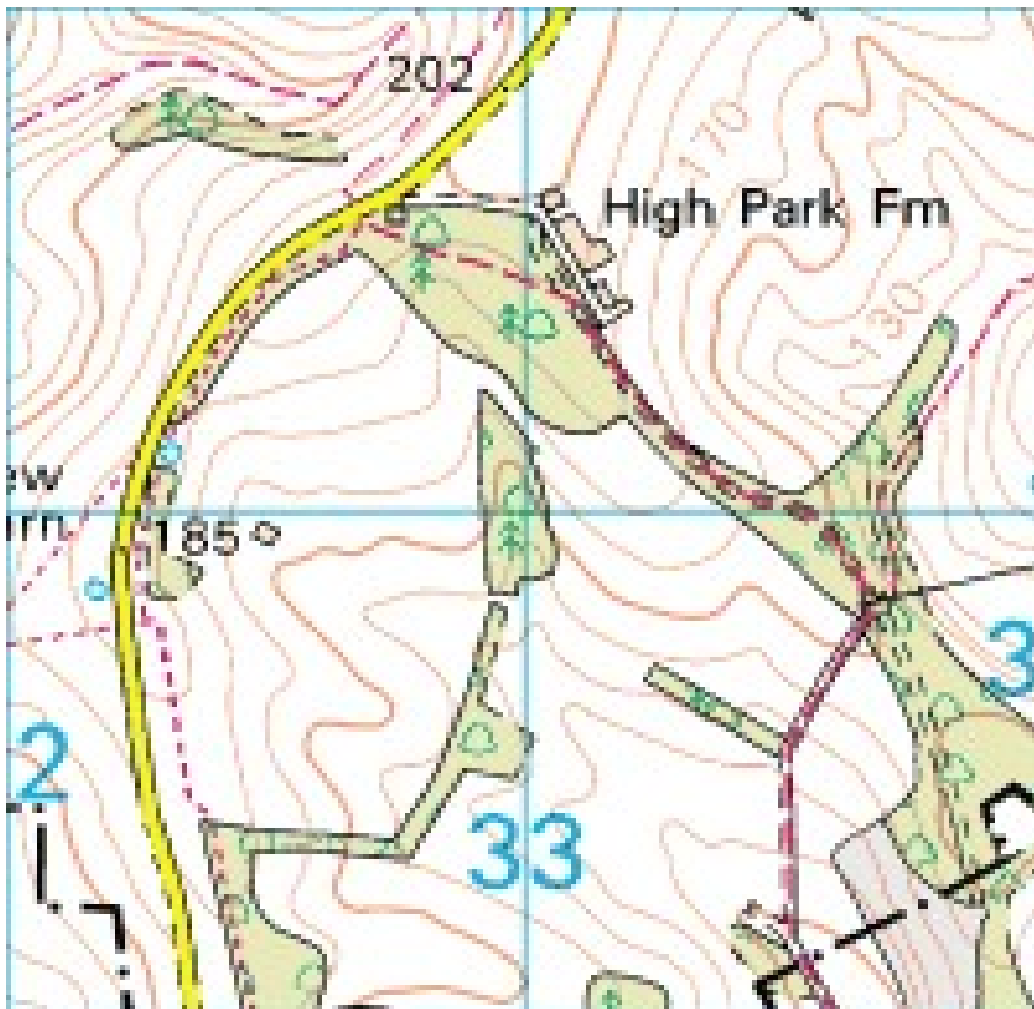


The sine law

If you take a look at the triangle on the top right-end side of the page, you see that the ratio of the sine of any angle to its opposite side is constant for every angle.



Below: the contour-line map of an area north of Brighton



“Trig points are a tool to give surveyors a frame of reference for surveying the UK. Typically, a trig point is a concrete post set on a high point such as a hill with a metal disc inset in the top which you can put your theodolite in. The trig point is at an accurately surveyed and documented position so you can survey other plots of land or buildings relative to one or more trig points.”

[From the website <http://jeremyp.net/trigpoint/index.php>]

“A network of triangles covers the area to be surveyed. Points of reference with known positions are situated at the corner of each triangle, allowing the surveyor to take detailed measurements. In Great Britain, these fixed points are marked by the four-foot-high concrete pillars often seen on hilltops or in the corner of fields. A theodolite - which measures angles between points - is fitted on top of the pillar to determine their relative positions.

The advent of satellite technology has greatly improved the accuracy and speed of establishing basic mapping control networks, enabling a position to be fixed within centimetres. This network ensures the particular projection being used to present the map data is of the right size, orientation and position to the Earth. The projection employed for Great Britain is the Transverse Mercator.

Having established control, the surveyor fits the details on the ground into the network provided by the control points. The calculation of surveys takes account of the different accuracy and methods of survey and control.”

[From the website: <http://www.ordnancesurvey.co.uk/oswebsite/aboutus/reports/misc/survey.html>]

