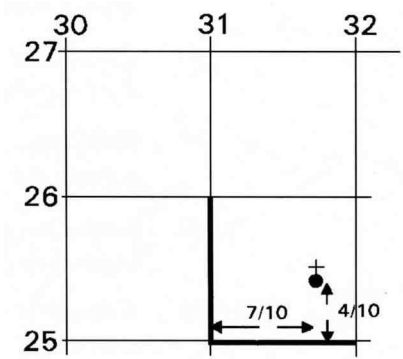


Grid References Tutorial



Introduction

1. All Ordnance Survey maps are criss-crossed by vertical and horizontal **grid lines**. If they could be drawn on the ground, they would be exactly one kilometre apart. On the map, grid lines are 4 centimetres apart on the 1:25,000 scale; 2 centimetres apart on the 1:50,000 scale. On Pathfinder and Explorer maps they are black; on Landranger and Outdoor Leisure maps, blue.

2. Grid lines are so-called after the **national grid** whose origin lies at a point in the Atlantic Ocean to the south-west of the Scilly Isles. The vertical ones are called eastings (because they progress eastwards from the point of origin), and the horizontal ones northings (which progress northwards).

3. A **grid reference** (often abbreviated to “GR”) is a useful means of identifying a particular spot on the map – or more accurately an area 100 metres square. They can help when discussing a route with someone over the telephone or in a letter; also when agreeing a rendezvous.

4. Grid references are usually quotes using **six figures**. The first three are the eastings; the second three are the northings. When quoting the grid reference, always describe the feature referred to, making it easier for the recipient to identify.

5. Sometimes references with just **four figures** are used as a rough guide to the area where a feature may be found (the first two are the eastings, the second two the northings).

6. Grid references are often **preceded by two letters** which also form part of the national grid system. However, these do not affect individual maps, and for most practical purposes need not to be included. It is nowadays more common and practical to prefix the grid reference with the number of the appropriate Landranger sheet.

7. To **take the grid reference of a location on the map**, follow the procedure described in figure ???.

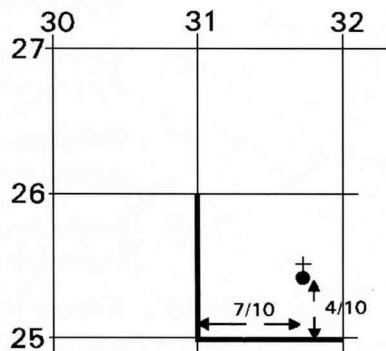
8. To **locate a point on the map from a given grid reference**, reverse the procedure described in figure 1

How to take a 6-figure grid reference

What is the grid reference of the church?

1) Identify the 1km square containing the church. Do this by selecting its left and bottom sides (imagine the letter "L" that bounds the square). Take the numbers on the edge of the map for these two sides (downstroke of the "L" first, just as you would write it) this gives:

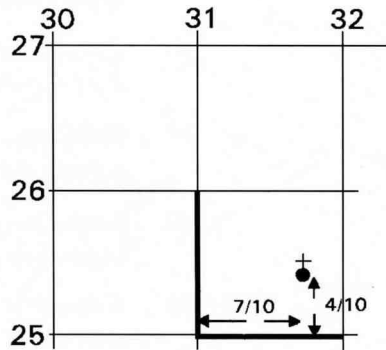
31_25_



(Note One: 3125 is the 4-figure grid reference of the square)

(Note Two: for ease of reading, the numbers against each grid line are repeated at 10km intervals in the body of the map).

2) Now an extra figure must be added to each pair of numbers to specify to the nearest 100m where the church lies within the square. Estimate the number of tenths (100m) the church lies from 'our' two sides, once again starting with the downstroke. How far from the downstroke? Seven tenths. How far from the horizontal stroke? Four tenths. Thus the six figure grid reference is:



317 254

3) When quoting a grid reference, for confirmation and to guard against error, always say what the GR refers to:

“the church at GR 317 254”

4) 6-figure grid references are repeated at 100km intervals across the country. If you need to define the GR uniquely, this can be done in either of two ways:

Method 1. The ‘correct’ way is to identify the two-letter code allocated to the 100km square containing the church. Each 100km square covering the country has been allocated such a code and the one(s) referring to any particular map can be found from the map margin. In this example, say the code is ‘SY’, then the full grid reference is:

“the church at GR SY 317 254”

Method 2. A more informal and commonly used way of giving a unique grid reference is to quote the Landranger sheet containing the location:

“the church at GR Map 194/317 254”