

## Grid References

To be useful we generally need to be able to identify places exactly on a map - for example we may wish to describe to the emergency services exactly where we are or co-ordinate the troop to meet at a specific place.

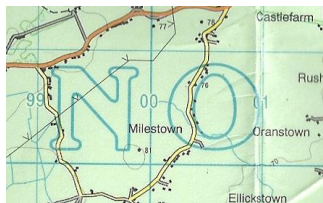
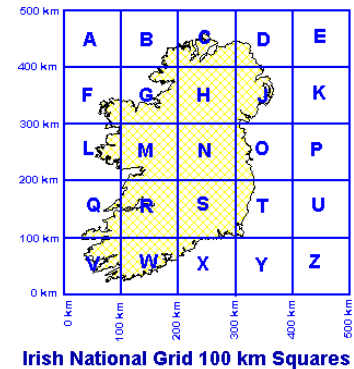
All small scale maps produced in Ireland over the last 50 years have used the **national grid**.

### The National Grid

The Ordnance Survey describes Ireland as a square 500km x 500km.

They split this square into 25, 100km squares known as the National Grid.

Each Square is identified by a letter, from A - Z with I omitted as it can be mistaken for l (L).



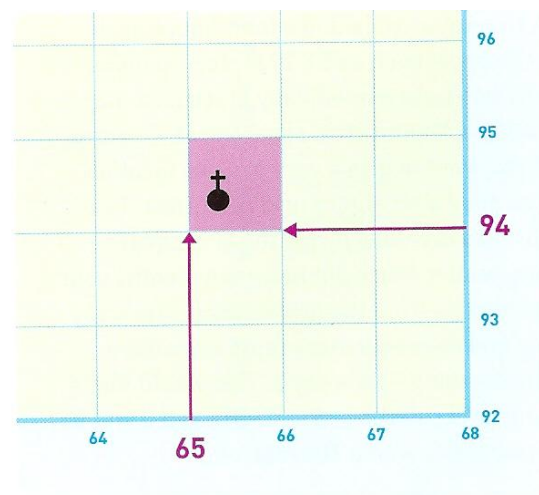
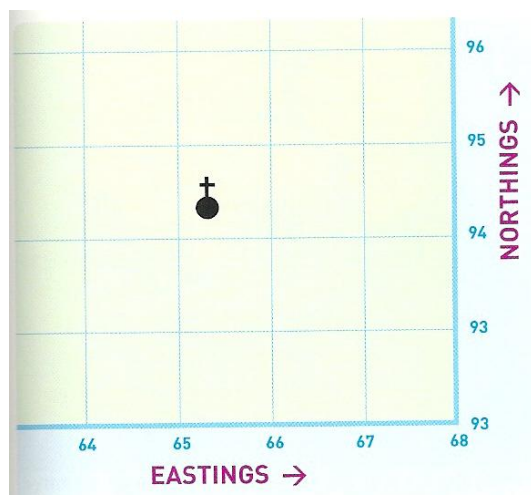
Ireland is covered by 89 1:50,000 (Discovery Series) maps and sometimes these maps overlap two or more of the national grid divisions - if you choose the wrong letter you will be 100km out so look for a large blue letter on the map.

### In the Grid

Each of these 100km squares is further divided into 100 smaller boxes. These are demonstrated by a series of light-coloured (blue on Discovery Series maps), vertical and horizontal lines, covering the whole map in squares.

Each line is numbered on the edges of the map, so that each square can be identified by its vertical and horizontal number. The vertical lines are called '**easting's**', because their numbers always increase from west to east (left to right). The horizontal lines are called '**northing's**' as their numbers always increase from south to north (bottom to top).

To identify a particular square on the map you give its grid reference by quoting the numbers of its grid square. This consists of giving the number of the easting on the left side of the square, plus the number of the northing at the bottom of the square. For example in the diagram below the coloured square would have a grid reference 6594. This is known as a **four figure grid reference**.



## Six – Figure Grid Reference

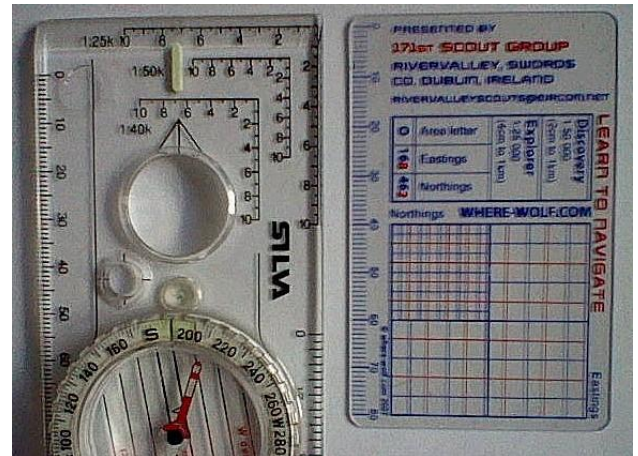
If you want to give a precise location, accurate to within 100 meters (the distance you should be able to see in reasonable visibility) you mentally divide the grid square into tenths.

These divisions are often marked out on a compass base or you could use a roamer

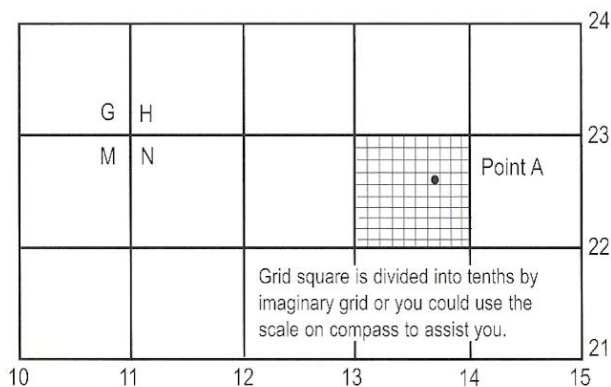
Work out how many tenths you are from your easting – 4 in above example

Then how many tenths it is from the northing – 3 in the above example

This would make your grid reference 654 943.



## Putting it all together



Grid reference for point A is N 137 227

1) Find the **grid letter** (N)

2) Going left to right across the map find the line nearest **and to the left** of your location. This is your **easting**, the first two numbers of your reference. (13)

3) Divide up the grid square into tenths from left to right and state your location as a decimal. This is your third number (7)

4) Going from bottom to top find the line nearest **but below** your location. This is your **northing**, the fourth and fifth numbers in your reference (22)

5) Divide up your grid square into tenths from bottom to top and state your location as a decimal. This is your sixth number (7)

Grid Reference N 137 227

## Practise OSI Discovery Series Sheet 50

Holy Family School	O 168 460	True /False	Garda Station Swords	O 182 465	True /False
Post Office Dublin Airport	O 433 164	True /False	Colliste Colm	O179 462	True /False
Martello Tower Portrane	J 253 493	True /False	Fingallians Roundabout	O 196 475	True /False
18 hole golf club Donabate	O 238 473	True /False	Train Station Malahide	O225 461	True/False