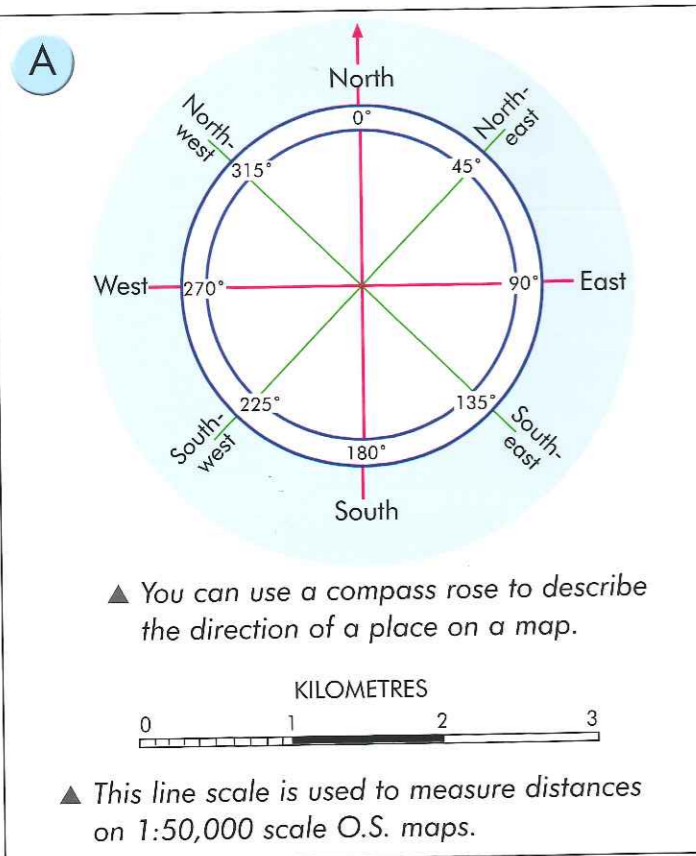


Distance, direction and scale

O.S. maps can be used to work out how far any two places are apart, and discover how long it would take to travel between them. Without O.S. maps it would be hard to get to places on time! But to do this we need to understand how these maps use distance, direction and scale.

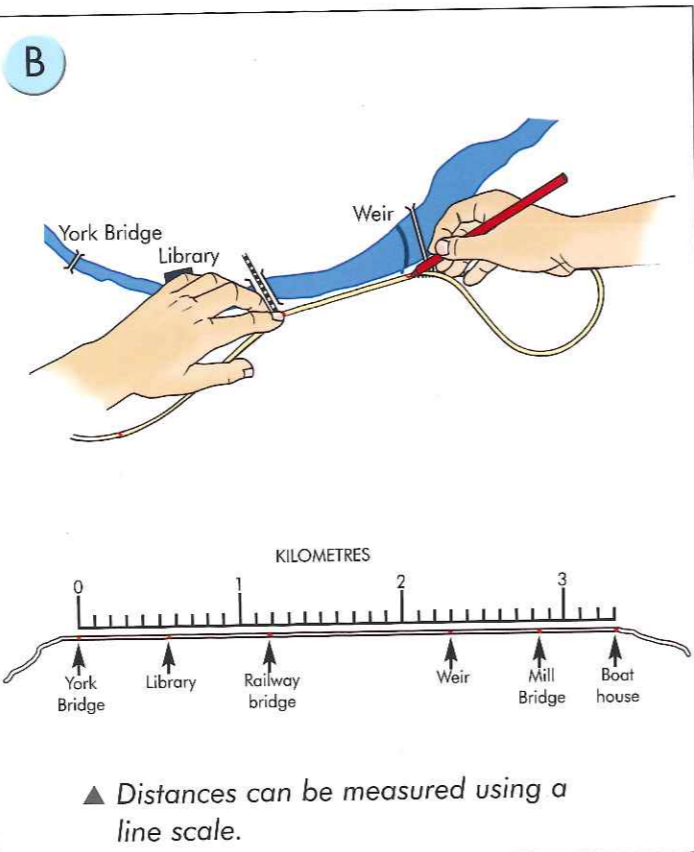
Distance and direction

Figure A shows a compass rose which has eight directions, and a line scale showing the distances on a map. Remember that directions are very easy to see on O.S. maps because North is always at the top, up the vertical grid lines.



Scale

O.S. maps like the one on page 15 have a ratio scale of 1:50,000. This means that 1 cm represents 50,000 cm (500 m) in real-life. Other maps use a line scale to show the real distance (see Figures A and B).

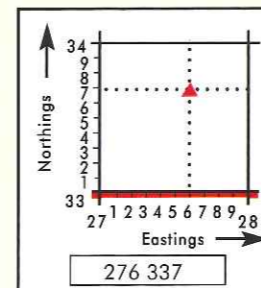
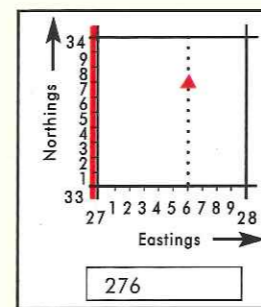
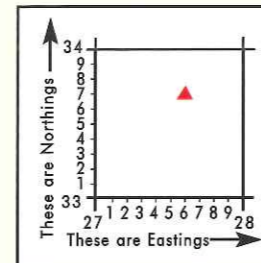


Six-figure grid references

Although four-figure grid references are good for locating areas on an O.S. map, they don't pinpoint the location of small features. This is why we prefer to use six-figure grid references. Figure C shows you how to do this.

C How to give the six-figure grid reference of a location

- 1 Find the square with the youth hostel ▲ inside it.
- 2 Write down the number of the line down the left side – then count how many tenths the youth hostel is towards the next vertical line.
- 3 Now add the number of the line below the youth hostel. Count how many tenths the youth hostel is towards the next horizontal line.
- 4 The six-figure grid reference is 276 337.



Do it yourself

- 1 Imagine that you're travelling up the M74 motorway, on your way to stay at Clydeside Farm, in southern Scotland. Using the map on page 15 and a copy of the text below, fill in all the blank spaces. To help you, there are three choices given for each curved distance!

You join the map at 958 200, due of Crawford village. At Junction 14, the car is travelling due At 935 206, it is pointing -, and at 929 220, it is travelling due The distance it has travelled between 958 200 and 929 220 is (3.2, 4.2 or 5.2) km. The direct distance between these two places is km. The car has another (2.0, 2.5 or 3.0) km to go before leaving the M74 at Junction 13 (at 931 245). From the roundabout near to the motorway service area, it has to go another (5.9, 6.9 or 7.9) km along the A702 then the A73 before reaching Clydeside Farm. This farm is on the side of the A73.