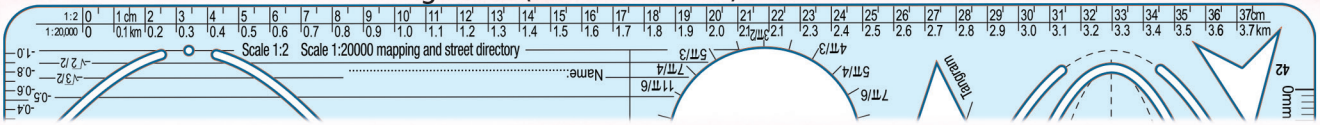


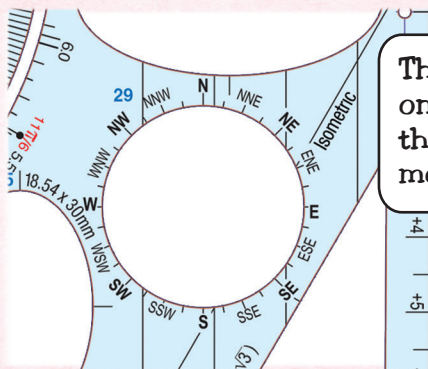
Navigation continued

The 1:20,000 scale on the Mathomat V7 template is the same scale as the map on the previous page being used at Rycroft High. Use the Mathomat scale ruler now to measure the distance in metres from Sienna, Ben and Alessia's homes in a straight line (as the crow flies) and the actual routes to school.

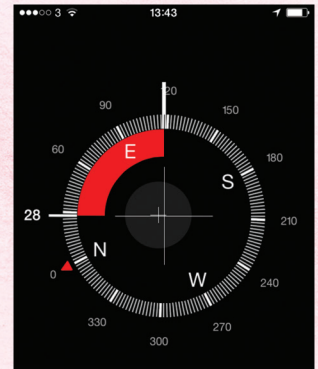
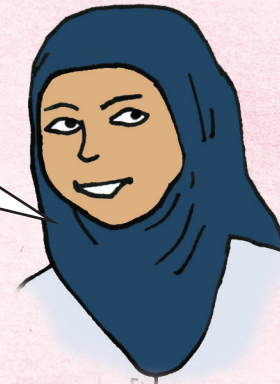


Name	Straight line distance to school in metres	Length of route to school in metres	Bearings from school to home	
			cardinal point	degrees
Sienna	m	m		
Ben	m	m		
Alessia	m	m		

North, South, East and West are called cardinal compass points. They are useful for finding location when precision is not required.

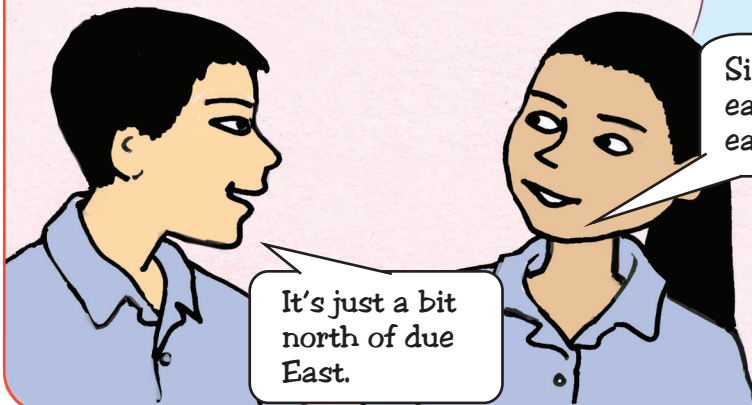
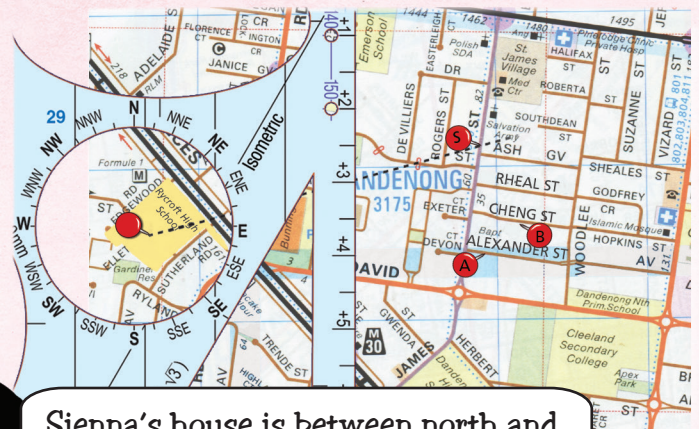


The compass rose on Mathomat is like the one on my mobile phone.



Using the map on the previous page, place the compass rose of Mathomat over the school. Aligning North of the compass with North of the map imagine a line to Sienna's house, which is shown with a pin marked 'S'.

The bearing is the point on the compass rose closest to the line.



It's just a bit north of due East.

Sienna's house is between north and east of Rycroft school. I would call it east-north-east.

Find the cardinal bearings to each house and complete the table above.

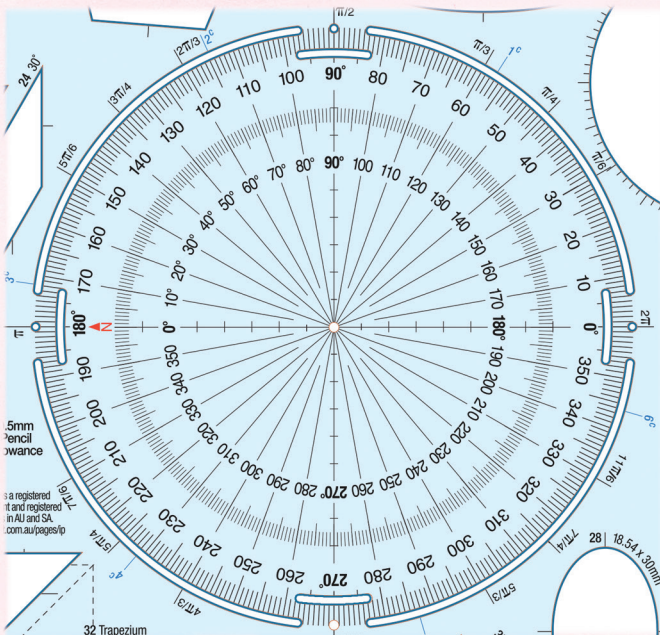
Bearings give a general direction, which is often enough to direct someone. To be more accurate, degrees are used.



Using the bearing scale

The tiny lines on a magnetic compass and on a mobile's compass represent 360° in a circle. On Mathomat you will find the same bearing scale

on the protractor. Complete the table below, then complete the table top left to put in the accurate degree bearings for each house from the school.



Directions	Bearing in degrees
North	0°
North East	
East	90°
South East	
South	180°
South West	
West	
North West	270°