Drawing and Measuring Bearings and Scale Drawings – www.m4ths.com
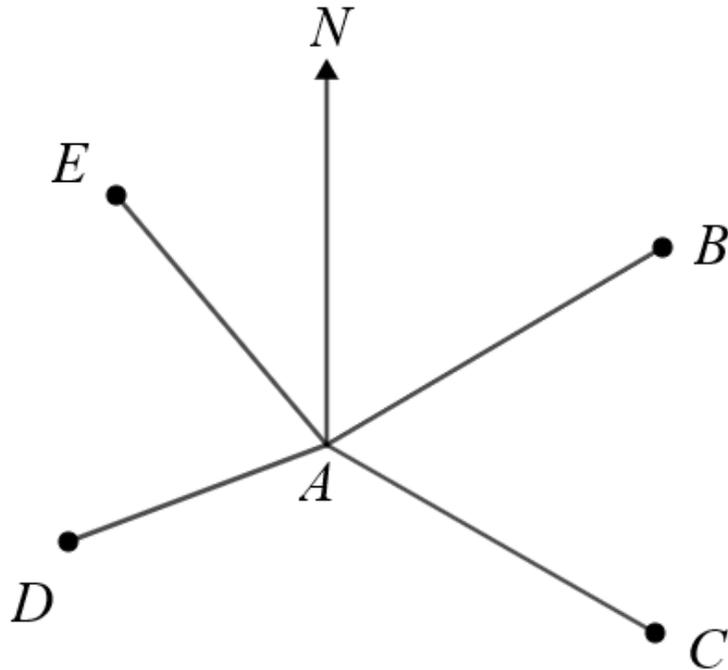
(1) Write down the 3 rules for measuring 3 figure bearings.

(i)_____

(ii)_____

(iii)_____

(2) Using the diagram below, complete the sentences given.

(a) The bearing of B from A is_____ (b) The bearing of C from A is_____

(c) The bearing of D from A is_____ (d) The bearing of E from A is_____

(3) Using the scale $1cm = 1km$ find each distance

A to B	B to E	C to A	D to B
D to E	B to C	E to A	C to E

(4) (a) Point F is on a bearing of 170° from A and $2km$ from A. Mark F on the diagram above.

(b) Measure the bearing of C from D on the diagram above,

(5) (a) The diagram below shows the point X. The point Y is on a bearing of 075° from X and $4cm$ from X. Mark the point Y on the diagram below


(b) The point Z is due east of X and is $5cm$ from X. Draw Z on the diagram.

(c) Measure the bearing of Z from Y and find the distance from Z to Y.

(6) The diagram below shows the points C and D.

(a) Find the bearing of D from C.

(b) Using the scale $1cm = 200m$, find the distance of C from D.

(c) The point E is on a bearing of 080^0 from C and 320^0 from D. Mark the point E on the diagram and find the diatnce from E to C and E to D.
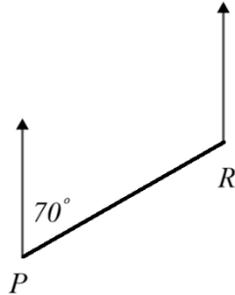
(7) The diagram below shows the points P and R
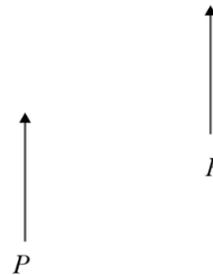
(a) The point Q is on a bearing of 050° from P and 280° from R. Mark Q above.

(b) The point S is due East of P and due south of R. Measure the bearing of S from Q.
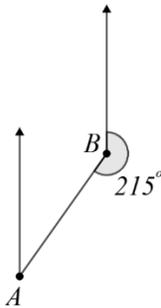
(8) The diagram below shows the points P and R.

(a) Write down the bearing of R from P.
(b) Use angle facts to find the bearing of P from R.

(8) The points A and B are shown below.

(a) Write down the bearing of A from B
(b) Find the bearing of B from A

(9) The bearing of P from Q is 070°. Find the bearing of Q from P.

(10) The bearing of S from T is 330°. Find the bearing of T from S.

(11) A is due north of B and C is due west of B. What is the maximum size the bearing of B can be from A?

(12) The points B, C, D and E are due north, east, south and west of A respectively and are all $5km$ from A. What is the bearing of C from B?

(13) The diagram below shows a map of part of Lincolnshire. The distance from Spalding to Boston direct is 15 miles.

(a) Use a protractor and ruler to estimate the bearing of Grantham from Spalding and the distance of Grantham from Spalding.
(b) Use a protractor and rule to estimate the bearing of Spalding from Lincoln and the distance of Spalding from Lincoln.
(c) Find the spot that is due West of Boston and due North of Spalding.
(d) How many of the towns labelled are within 20 miles of Grantham?
(e)* Find the point due west of Spalding and southeast of Grantham.
(f)* Find the locus of points equidistant from Holbeach and Bourne.
(g)* Show that there are no points that are both 5 miles from Lincoln and Grantham.