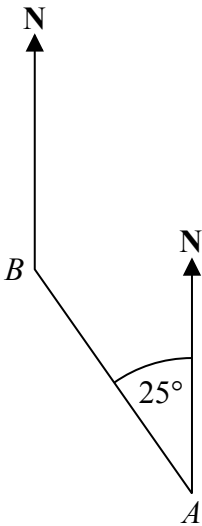


1.

[3 marks]

The diagram shows the positions of two churches, *A* and *B*



Amber says,
“The bearing of church *B* from church *A* is 025°”

- (a) Amber is wrong.
Explain why.

.....
.....
(1)

- (b) Calculate the correct bearing of church *B* from church *A*

.....°
(1)

- (c) Calculate the bearing of church *A* from church *B*

.....°
(1)

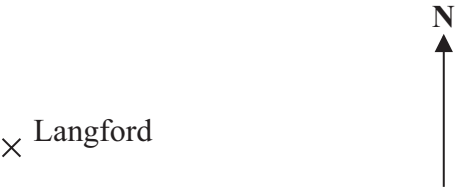
The diagram shows part of a map.



Find, by measuring, the bearing of the tower from the church.

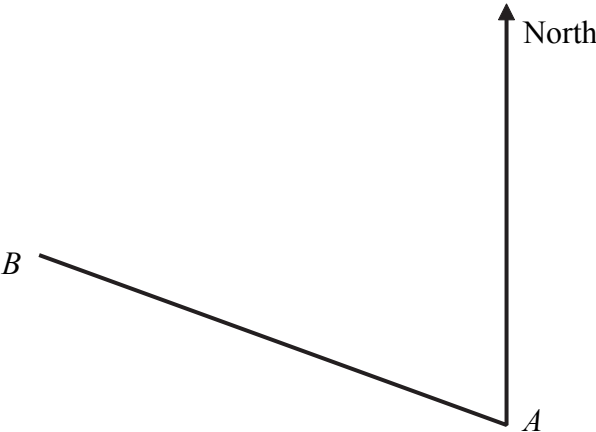
.....°

Here is a map showing three towns.



Measure the bearing of Hitchin from Langford.

.....°



(a) By measurement, find the bearing of B from A .

.....°

(2)

(b) The bearing of another point, C , from A is 226° .
Work out the bearing of A from C .

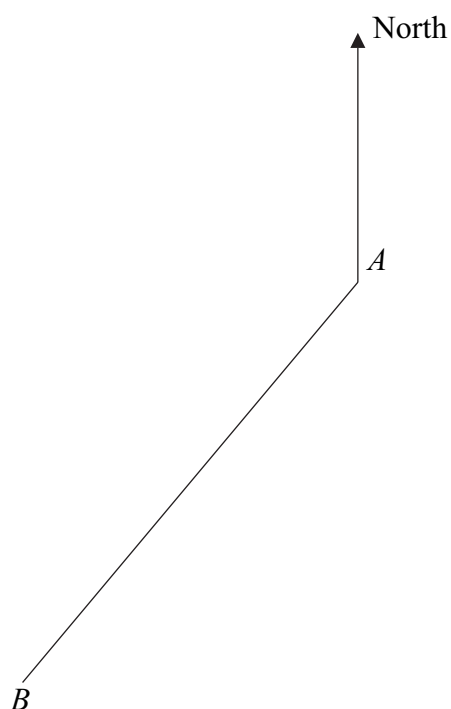
.....°

(2)

The bearing of a ship from a lighthouse is 055°
Work out the bearing of the lighthouse from the ship.

.....°

The diagram shows two towns, A and B .



- (a) Measure the bearing of B from A .

.....
 (2)

- (b) A plane flies along the perpendicular bisector of the line AB .
 Use ruler and compasses to construct the perpendicular bisector of AB .
 Show all your construction lines.

(2)

- (c) The bearing of another town, C , from A is 120° .
 Work out the bearing of A from C .

.....
 (1)

7.

[2 marks]

The diagram shows two points S and T .
The bearing of T from S is 043°

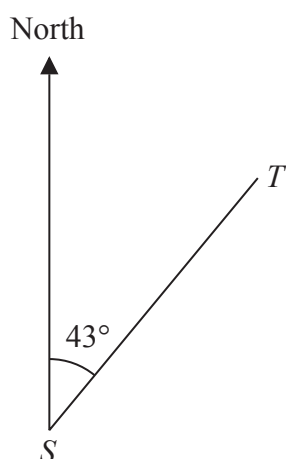


Diagram **NOT**
accurately drawn

Work out the bearing of S from T .

.....^o

8.

[3 marks]

The diagram shows the position of two churches, A and B



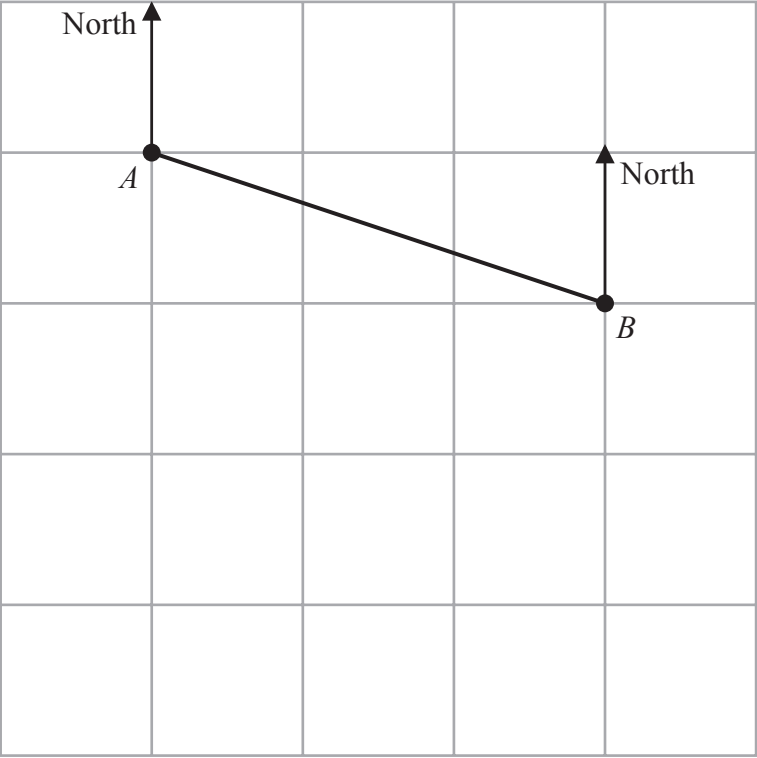
Church C is on a bearing of 130° from church A .

Church C is on a bearing of 245° from church B .

In the space above, draw an accurate diagram to show the position of church C .

Mark the position of church C with a cross (\times).

Label it C .



The diagram shows point A and point B on a map.
The point C is due south of A
The bearing of C from B is 235°
(a) Mark the point C on the map.

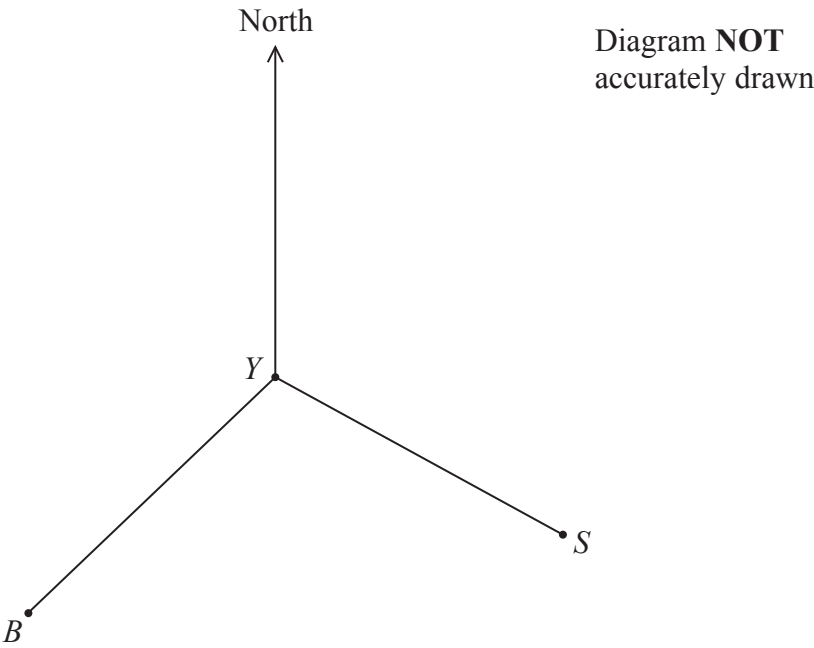
(2)

The bearing of a point D from B is 168°
(b) Find the bearing of B from D

.....^o
(2)

Manchester airport is on a bearing of 330° from a London airport.
Find the bearing of the London airport from Manchester airport.

.....^o



The diagram shows the positions of a yacht Y , a ship S and a beacon B .
The bearing of B from Y is 228°

(a) Find the bearing of Y from B .

.....^o

(2)

The bearing of S from Y is 118°

(b) Find the size of the angle BYS .

.....^o

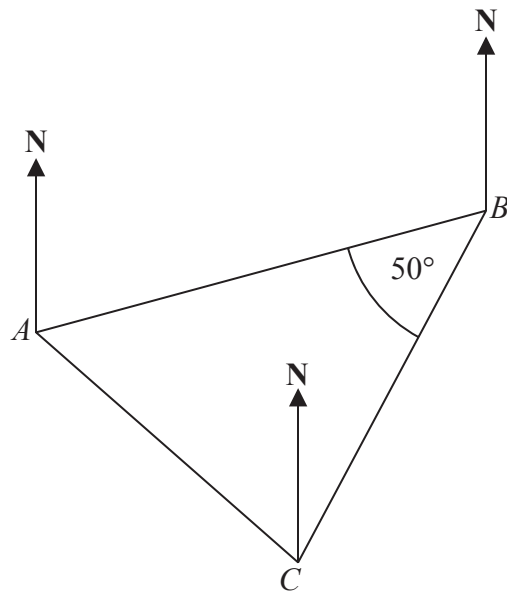
(1)

(c) Given also that $BY = SY$, find the bearing of S from B .

.....^o

(2)

The diagram shows the positions of three points, A , B and C , on a map.



The bearing of B from A is 070°

Angle ABC is 50°

$AB = CB$

Work out the bearing of C from A .

The diagram shows the positions of three turbines A , B and C .

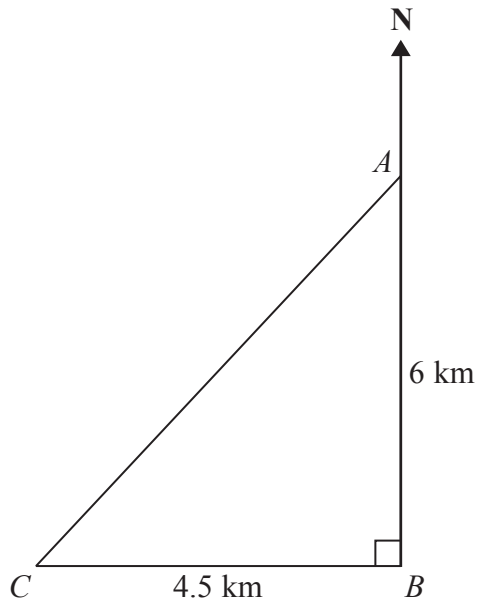


Diagram **NOT**
accurately drawn

A is 6 km due north of turbine B .
 C is 4.5 km due west of turbine B .

(a) Calculate the distance AC .

..... km
(3)

(b) Calculate the bearing of C from A .
Give your answer correct to the nearest degree.

.....°
(4)

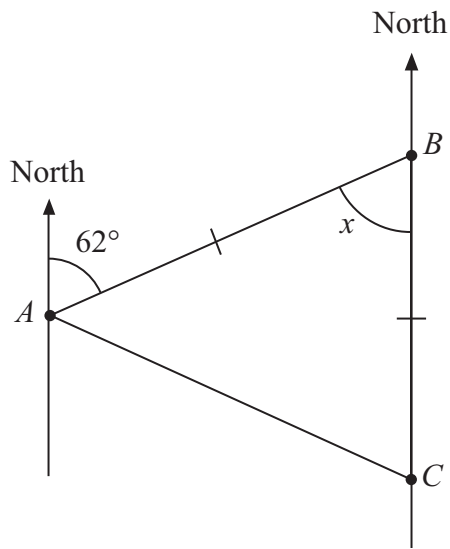


Diagram **NOT**
accurately drawn

The bearing of B from A is 062° .
 C is due south of B .
 $AB = CB$.

(a) (i) Find the size of angle x .

.....^o

(ii) Give a reason for your answer.

.....
(2)

(b) Work out the bearing of C from A .

.....^o
(2)

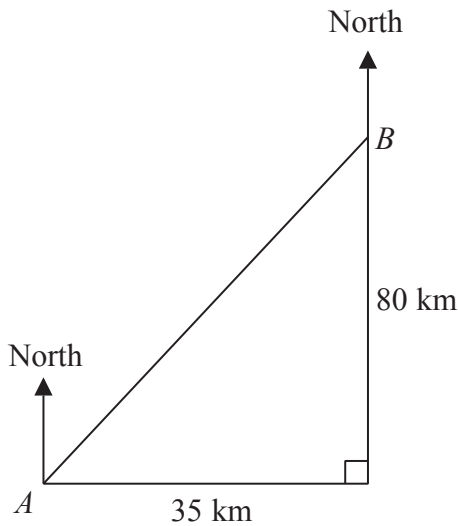


Diagram **NOT**
accurately drawn

Town B is 35 km east and 80 km north of town A .

Work out the bearing of A from B .

Give your answer correct to the nearest degree.

.....^o

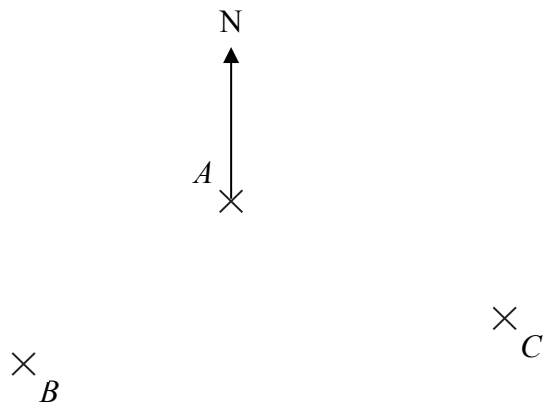


Diagram **NOT**
accurately drawn

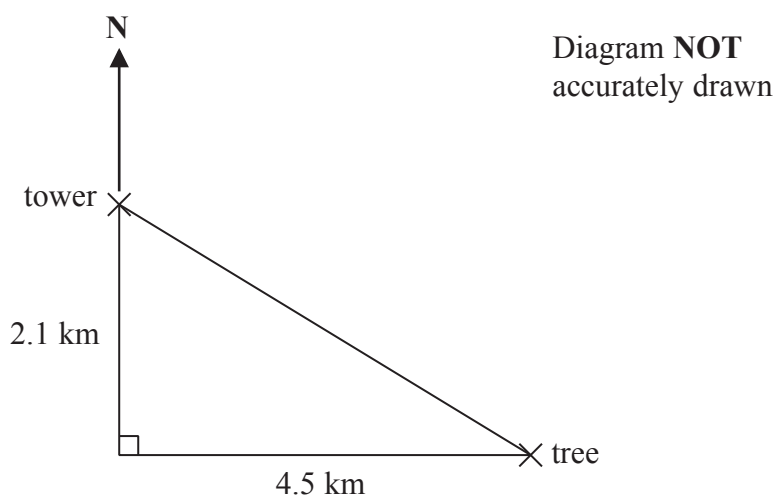
A , B and C are three points on a map.

The bearing of A from C is 293°

Find the bearing of C from A .

.....^o

The diagram shows the positions of a tower and a tree.



The tree is 2.1 km South of the tower and 4.5 km East of the tower.

- (a) Work out the distance between the tower and the tree.
Give your answer correct to one decimal place.

..... km
(3)

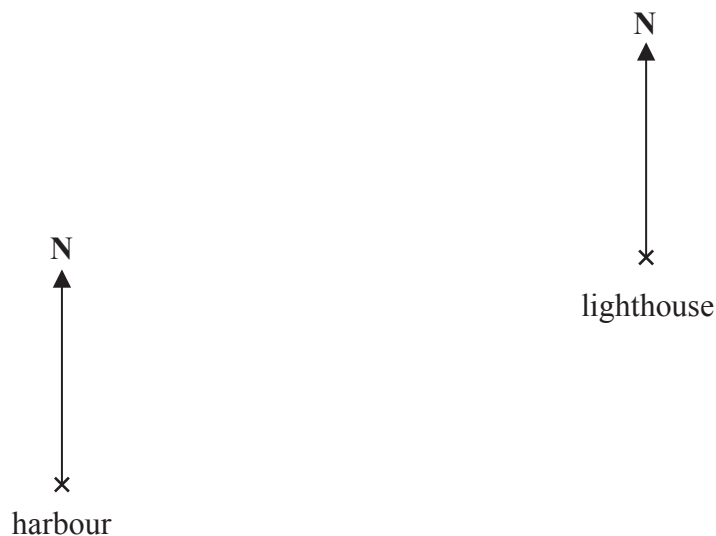
- (b) Work out the bearing of the tree from the tower.
Give your answer correct to the nearest degree.

.....°
(4)

18.

[3 marks]

The diagram shows the positions of a lighthouse and a harbour on a map.



A boat is on a bearing of:

300° from the lighthouse

040° from the harbour.

On the diagram, mark with a cross (×) the position of the boat.

Label the boat *B*.

19.

[3 marks]

The diagram shows the positions of two lighthouses, *A* and *B*, on a map.



A ship is on a bearing of 110° from *A*.

The same ship is on a bearing of 150° from *B*.

Mark the position of the ship with a cross (×) and label it *C*.

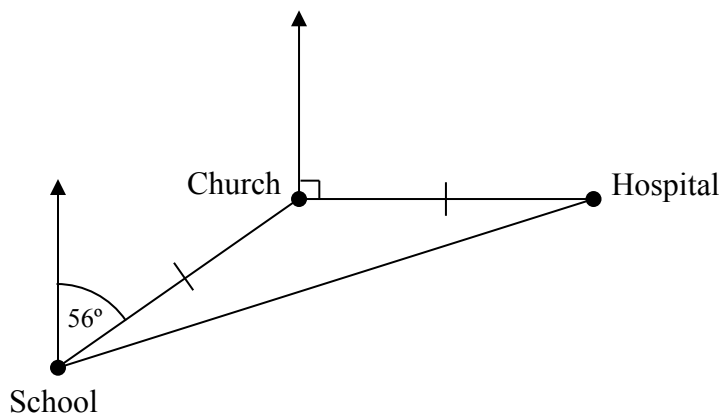


Diagram **NOT**
accurately drawn

The diagram shows the position of three buildings in a town.

The bearing of the Church from the School is 056° .

The Hospital is due East of the Church.

The distance from the Church to School is equal to the distance from the Church to the Hospital.

Work out the bearing of the School from the Hospital.

There is a coastguard station at point A and at point B .

B is due East of A .

The distance from A to B is 12 km.

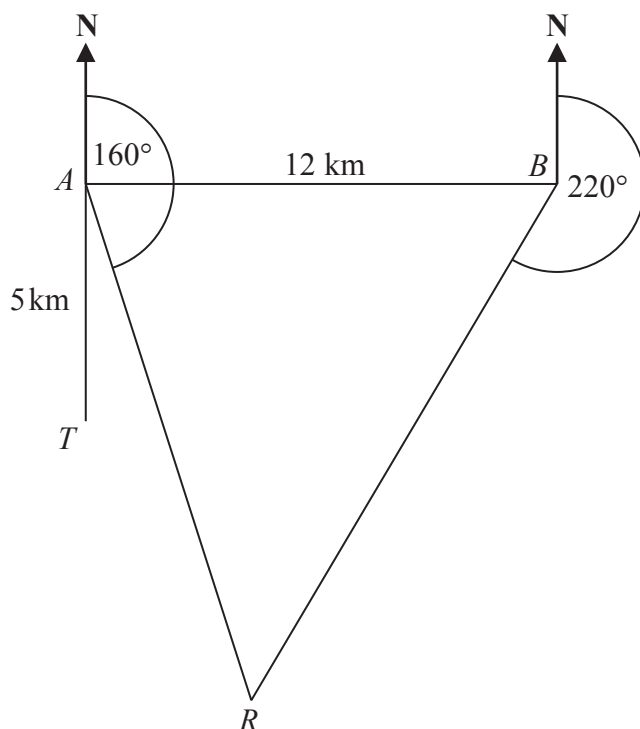


Diagram **NOT**
accurately drawn

There is a rowing boat at point R .

R is on a bearing of 160° from A .

R is on a bearing of 220° from B .

There is a speedboat at point T .

T is 5 km due South of A .

Work out the shortest distance from T to R .

Give your answer correct to 1 decimal place.

You must show all your working.

..... km