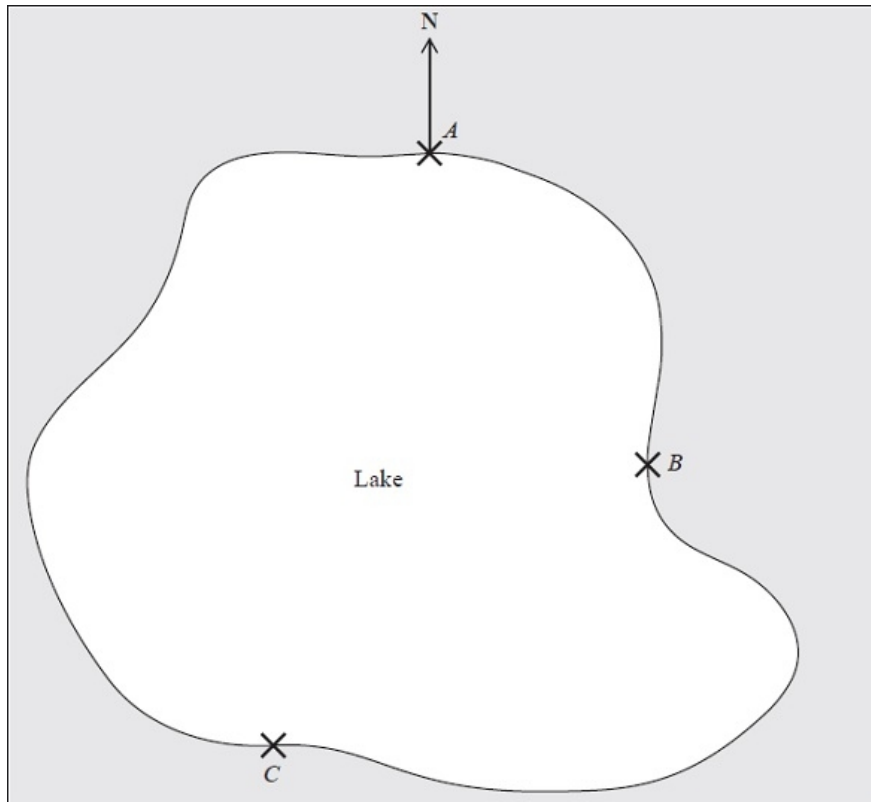


## G164 Bearings

Q1.

The map shows the positions of three places  $A$ ,  $B$  and  $C$  on the edge of a lake.



Scale 1 cm represents 2 km

(a) Find the bearing of  $B$  from  $A$ .

.....°

(1)

A ferry travels in a straight line from  $A$  to  $B$ . It then travels in a straight line from  $B$  to  $C$ .

A speedboat travels in a straight line from  $A$  to  $C$ .

(b) How many more kilometres does the ferry travel than the speedboat?

You must show your working.

..... km

(4)

**(Total for Question is 5 marks)**

**Q2.**

The diagram shows part of a map.



(a) Find the bearing of the church from the tower.

.....°  
(1)

The scale of the map is 1 cm represents 2.5 km.

(b) Work out the real distance between the tower and the church.

.....km  
(2)

A school is 15 km due North of the church.

(c) On the diagram, mark with a cross (x) the position of the school. Label your cross S.

(2)

**(Total for Question is 5 marks)**

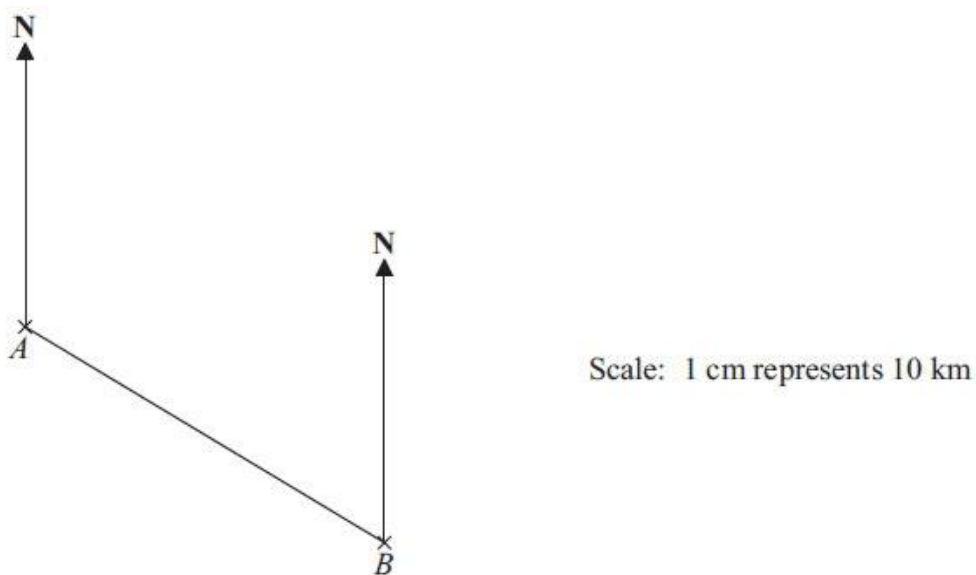
**Q3.**

The bearing of a ship from a lighthouse is  $050^\circ$   
Work out the bearing of the lighthouse from the ship.

.....°  
**(Total for Question is 2 marks)**

**Q4.**

The scale diagram shows the positions of two towns, *A* and *B*.



(a) Measure and write down the bearing of town *B* from town *A*.

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

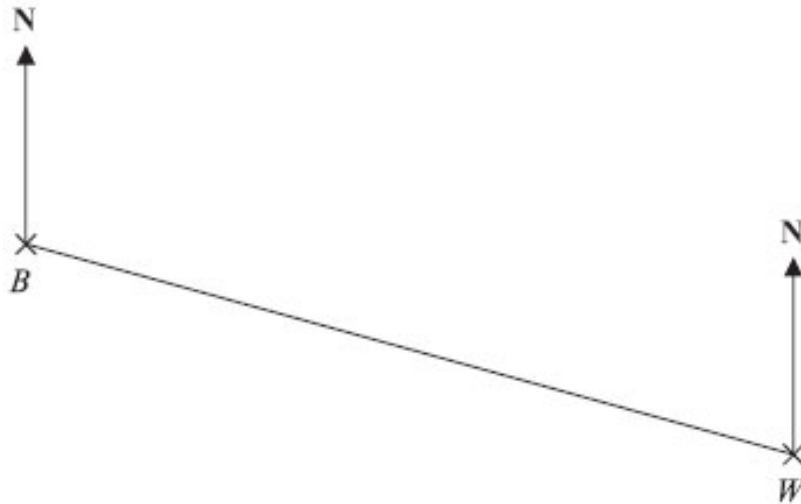
(b) What is the real distance from town *A* to town *B*?  
Give your answer in km.

.....  
**(3)**

**(Total for Question is 4 marks)**

**Q5.**

The diagram shows the positions of two villages, Beckhampton (*B*) and West Kennett (*W*).



Scale: 4 cm represents 1 km.

(a) Work out the real distance, in km, of Beckhampton from West Kennett.

(2)

The village, Avebury (*A*), is on a bearing of  $038^\circ$  from Beckhampton.

On the diagram, *A* is 6 cm from *B*.

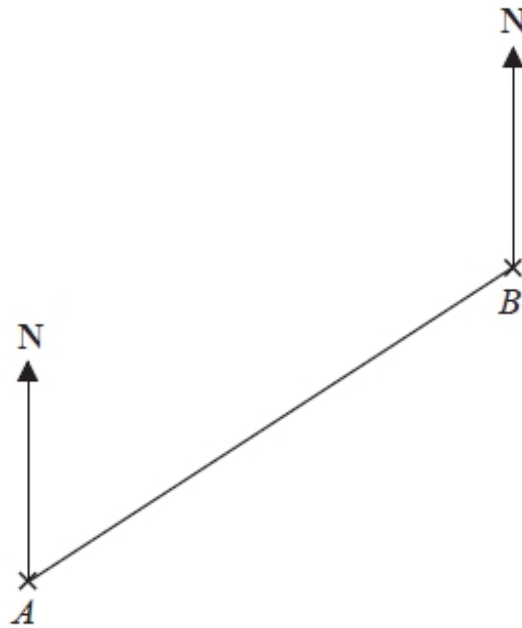
(b) On the diagram, mark *A* with a cross ( $\times$ ).  
Label the cross *A*.

(2)

**(Total for Question is 4 marks)**

**Q6.**

The scale diagram shows the positions of two airports, *A* and *B*.



Scale: 1 cm represents 10 km

(a) Measure and write down the bearing of airport *B* from airport *A*.

.....°  
(1)

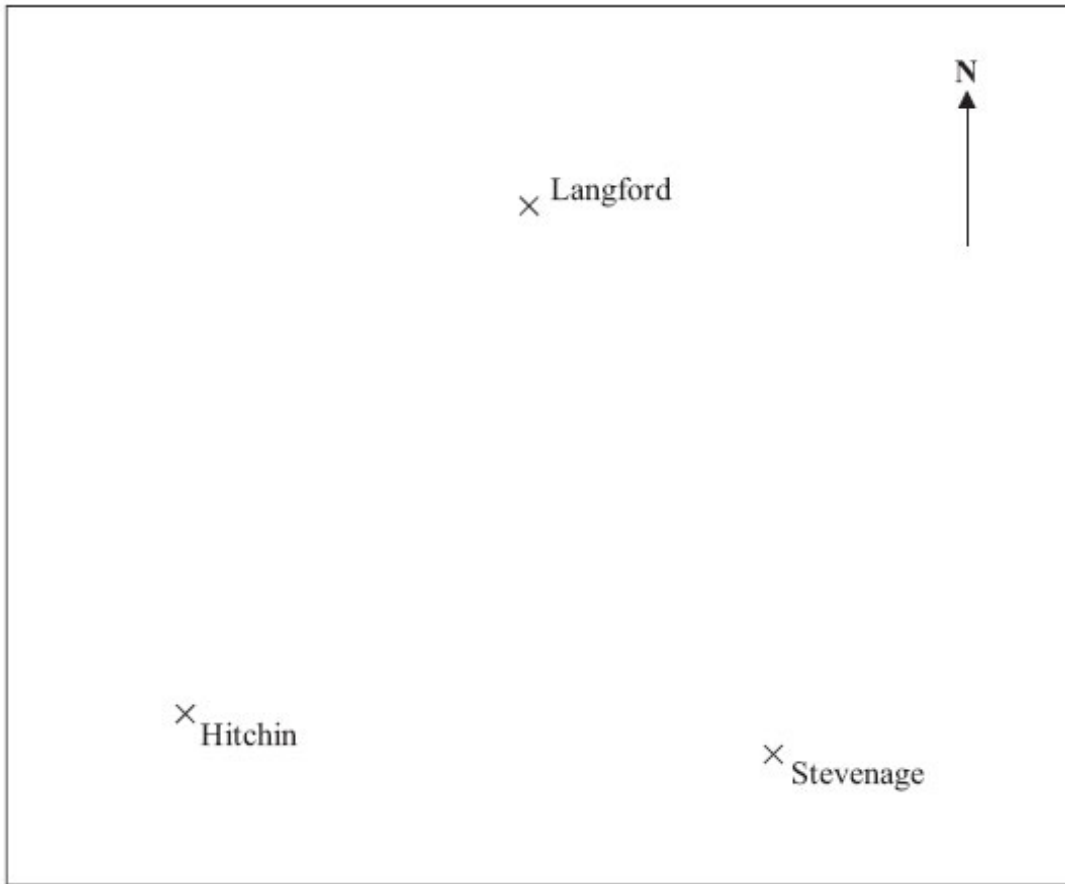
(b) What is the real distance from airport *A* to airport *B*?

..... km  
(2)

**(Total for question = 3 marks)**

**Q7.**

Here is a map showing three towns.



Scale: 1 cm represents 1 km.

(a) Work out the real distance from Hitchin to Langford.

..... (1)

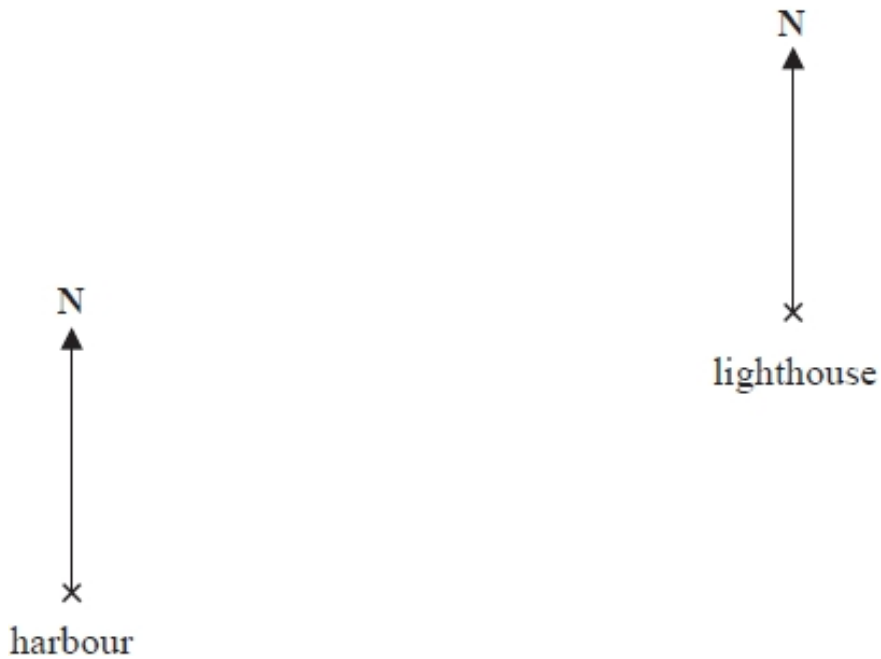
(b) Measure the bearing of Stevenage from Langford.

..... (2)

**(Total for Question is 3 marks)**

**Q8.**

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.

(a) On the diagram, mark with a cross (x) the position of the boat. Label the boat *B*.

(3)

The scale of the map is 1 cm represents 50 000 cm.

(b) Work out the real distance from the harbour to the lighthouse. Give your answer in km.

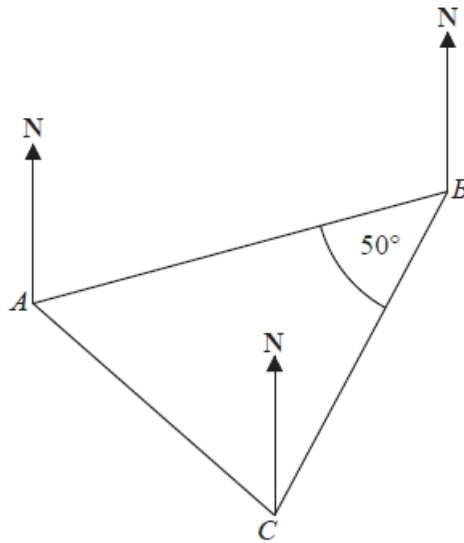
.....km

(2)

**(Total for question = 5 marks)**

**Q9.**

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



The bearing of  $B$  from  $A$  is  $070^\circ$

Angle  $ABC$  is  $50^\circ$

$AB = CB$

Work out the bearing of  $C$  from  $A$ .

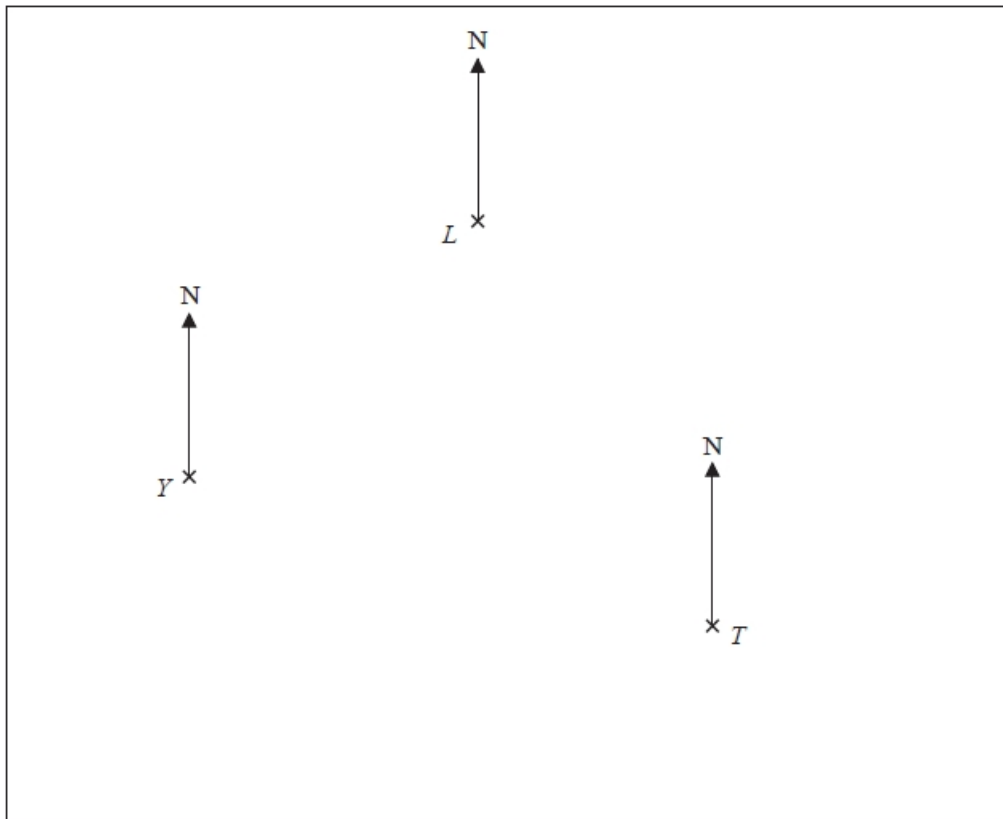
.....<sup>o</sup>

**(Total for question is 3 marks)**



**Q10.**

The diagram shows the positions of a lighthouse  $L$ , a yacht  $Y$  and a tanker  $T$  on a map.



Scale 1 cm represents 10 km

(a) Measure the bearing of  $L$  from  $Y$ .

.....°

(1)

The tanker,  $T$ , sails 80 km on a bearing of  $320^\circ$ .

(b) Find the distance, in km, between the tanker and the lighthouse when the tanker is closest to the lighthouse.

..... km

(2)

**(Total for question = 3 marks)**

**Q11.**

The diagram shows the position of town *A*.



Scale: 1 cm represents 10 km

Town *B* is 64 km from town *A* on a bearing of  $070^\circ$ .

Mark the position of town *B*, with a cross (x).

Use a scale of 1 cm represents 10 km.

**(Total for Question is 2 marks)**

**Q12.**

The diagram shows the position of two boats, *B* and *C*.



Boat *T* is on a bearing of  $060^\circ$  from boat *B*. Boat *T* is on a bearing of  $285^\circ$  from boat *C*.

In the space above, draw an accurate diagram to show the position of boat *T*.

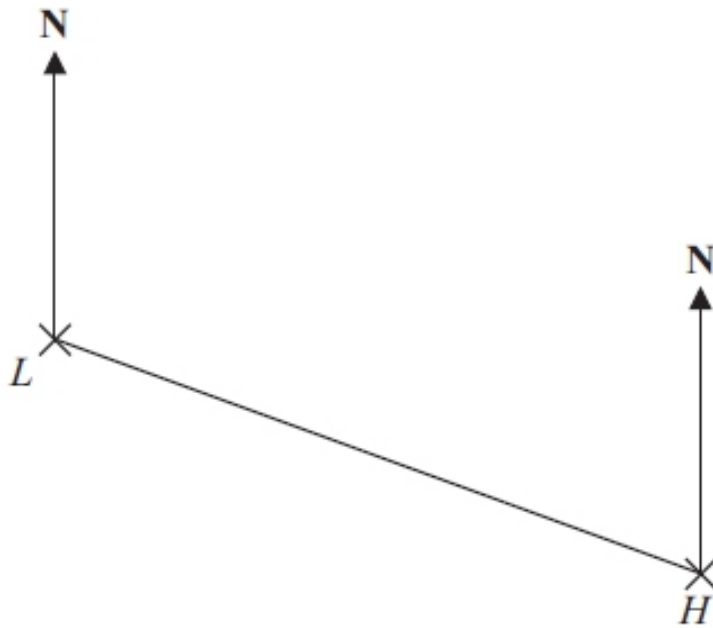
Mark the position of boat *T* with a cross (x).

Label it *T*.

**(Total for Question is 3 marks)**

**Q13.**

The diagram shows the position of a lighthouse  $L$  and a harbour  $H$ .



The scale of the diagram is 1 cm represents 5 km.

(a) Work out the real distance between  $L$  and  $H$ .

..... km  
(1)

(b) Measure the bearing of  $H$  from  $L$ .

.....°  
(1)

A boat  $B$  is 20 km from  $H$  on a bearing of  $040^\circ$ .

(c) On the diagram, mark the position of boat  $B$  with a cross (x).  
Label it  $B$ .

(2)

**(Total for Question is 4 marks)**