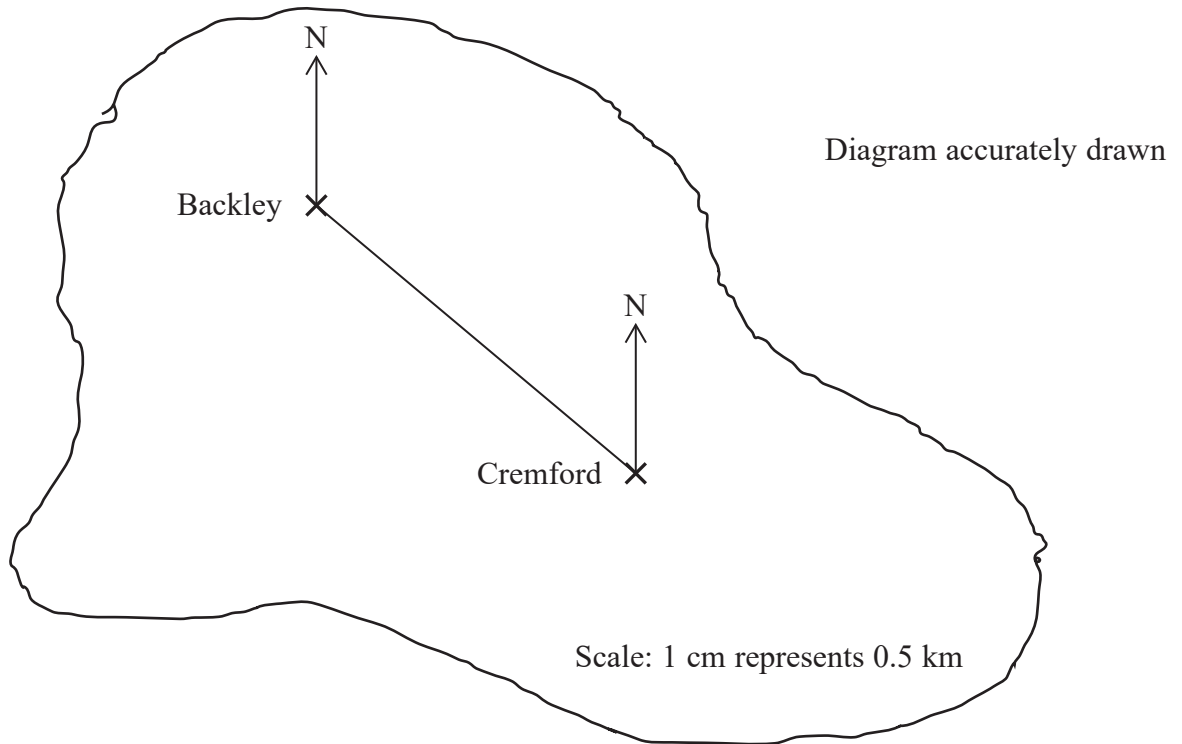


1 Here is a map of an island.



A straight road joins the two villages, Backley and Cremford.

(a) Work out the real distance between the two villages.

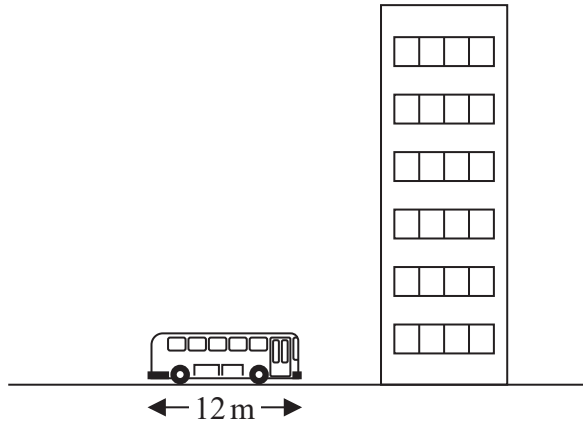
..... km  
(2)

(b) Find the bearing of Cremford from Backley.

.....  
(1)

**(Total for Question 1 is 3 marks)**

2



The picture shows a bus next to a building.  
The bus has a length of 12 m.

The bus and the building are drawn to the same scale.

Work out an estimate for the height, in metres, of the building.

..... m

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

3 The diagram shows a tree and a man.



The man is of average height.  
The tree and the man are drawn to the same scale.

(a) Write down an estimate for the real height, in metres, of the man.

..... metres  
(1)

(b) Find an estimate for the real height, in metres, of the tree.

..... metres  
(2)

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

4 A map has a scale of 1 cm to 14 km.

On the map, the distance between Manchester and London is 18.8 cm.

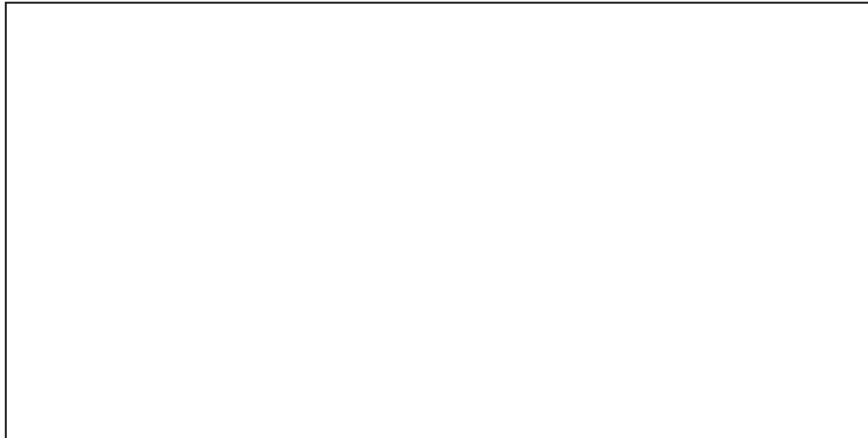
What is the real distance, in km, between Manchester and London?

.....km

---

**(Total for Question 4 is 2 marks)**

5 The diagram shows a scale drawing of a tennis court.



The scale of the drawing is 1 : 200

Work out the perimeter of the real tennis court.  
Give your answer in metres.

..... metres

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

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6 The diagram shows two points,  $A$  and  $B$ , on a map.

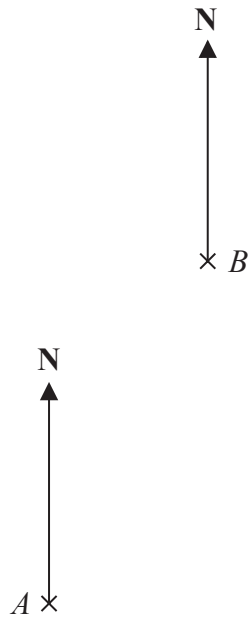


Diagram accurately drawn

Scale: 1 to 25 000

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

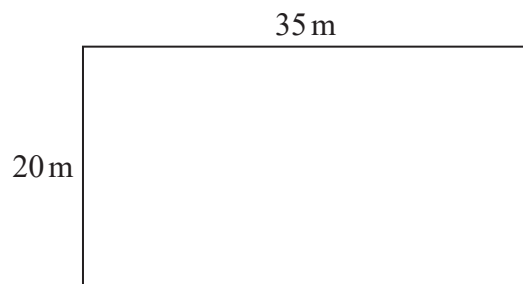
.....  
(1)

(b) Work out the real distance between  $A$  and  $B$ .  
Give your answer in kilometres.

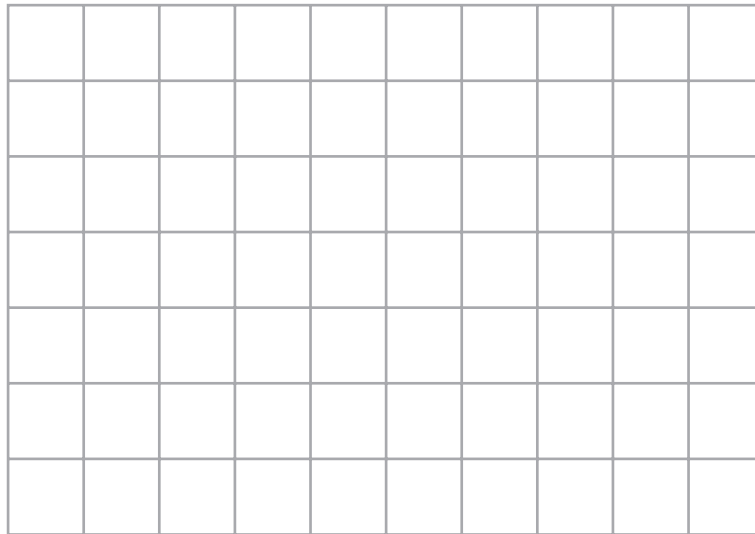
..... kilometres  
(3)

**(Total for Question 6 is 4 marks)**

7 The diagram shows a rectangle.



On the centimetre grid below, draw an accurate scale drawing of this rectangle.  
Use a scale of 1 cm to represent 5 m.



**(Total for Question 7 is 2 marks)**

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- 8** On a scale drawing, a building has length 12.4 cm and width 9.4 cm.  
The real length of the building is 62 metres.

Work out, in metres, the real width of the building.

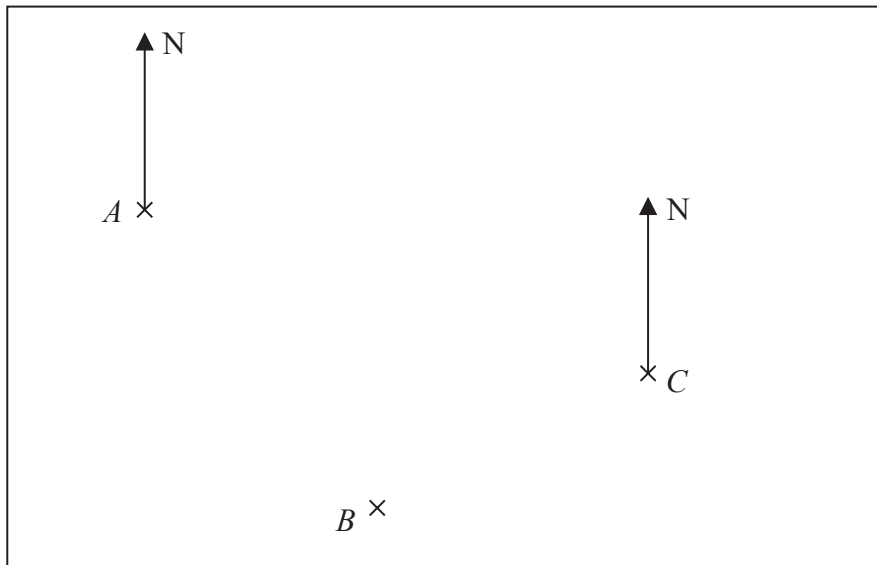
..... metres

**(Total for Question 8 is 3 marks)**

---



9 The accurately drawn map shows the positions of three points,  $A$ ,  $B$  and  $C$ , in a field.



Scale: 1 cm represents 150 metres

Parveen walks in a straight line from  $A$  to  $B$ .  
She then walks in a straight line from  $B$  to  $C$ .

Susan walks in a straight line from  $A$  to  $C$ .

Parveen walks more metres than Susan.

(a) How many more?

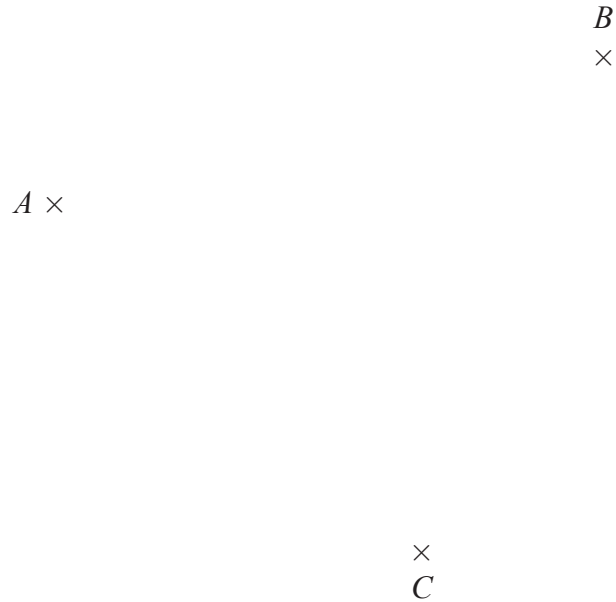
..... metres  
(3)

(b) Find by measurement the bearing of  $A$  from  $C$ .

.....  
(1)

(Total for Question 9 is 4 marks)

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



1 cm represents 100 metres.

Point  $T$  is 250 metres from point  $A$ .

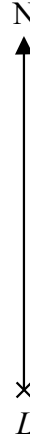
Point  $T$  is equidistant from point  $B$  and point  $C$ .

On the map, show one of the possible positions for point  $T$ .

**(Total for Question 10 is 3 marks)**

---

11 The accurate scale drawing shows the positions of port  $P$  and a lighthouse  $L$ .



Scale: 1 cm represents 4 km.

Aleena sails her boat from port  $P$  on a bearing of  $070^\circ$

She sails for  $1\frac{1}{2}$  hours at an average speed of 12 km/h to a port  $Q$ .

Find

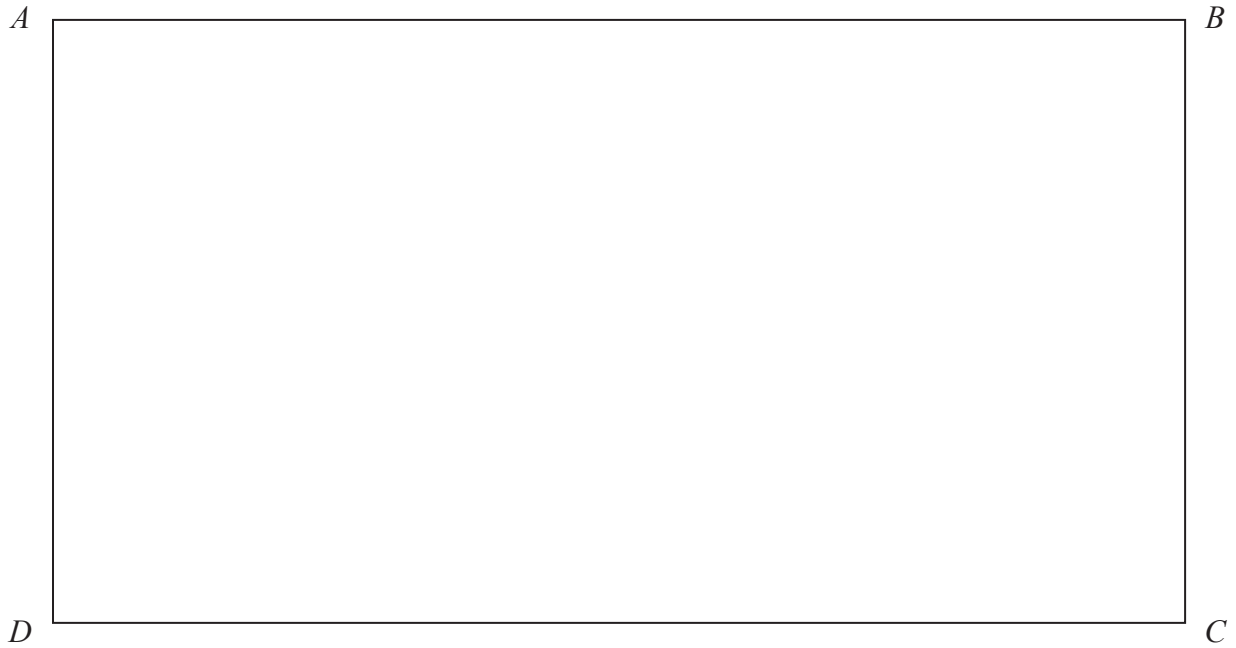
- (i) the distance, in km, of port  $Q$  from lighthouse  $L$ ,
- (ii) the bearing of port  $Q$  from lighthouse  $L$ .

distance  $QL = \dots\dots\dots$  km

bearing of  $Q$  from  $L = \dots\dots\dots^\circ$

**(Total for Question 11 is 5 marks)**

12 Here is a plan of a kitchen drawn to a scale of 1 : 30



Scale 1:30

Sam is going to put a small table in the kitchen.

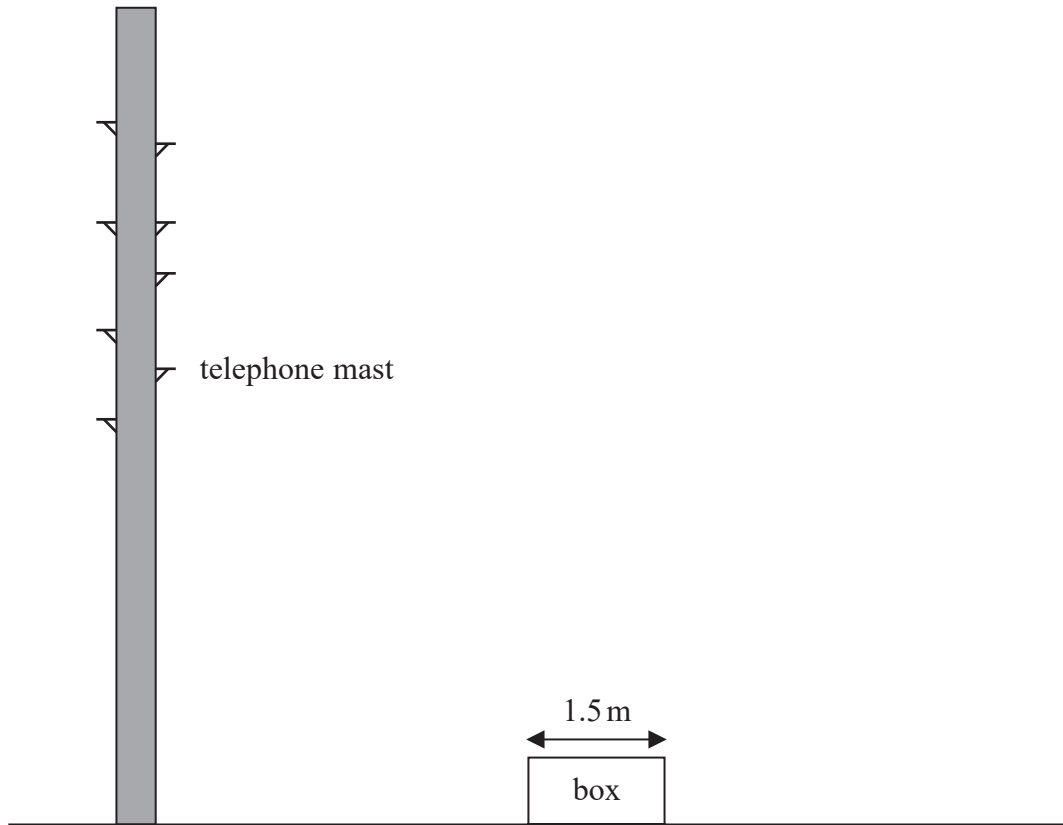
The table has to be  
more than 180 cm from  $A$   
more than 150 cm from  $BC$

Show, by shading on the diagram, the region where Sam can put the table.

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(Total for Question 12 is 4 marks)

13 The accurate scale diagram shows a telephone mast and a box.



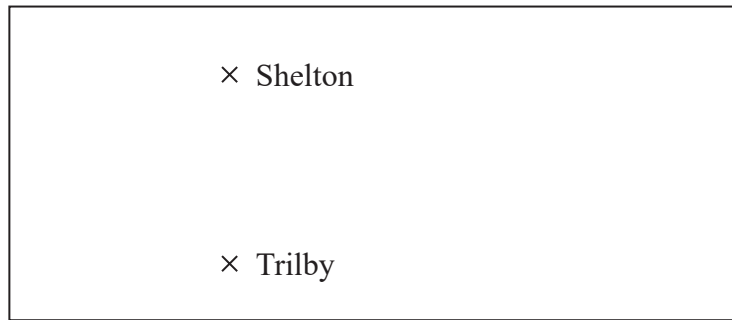
The box has a real width of 1.5 metres.

Find an estimate for the real height, in metres, of the telephone mast.

..... metres

**(Total for Question 13 is 2 marks)**

14 The diagram shows two places on a map.



Scale: 1 centimetre represents 20 kilometres

(a) What is the actual distance, in kilometres, from Shelton to Trilby?

..... kilometres  
(2)

On a scale drawing, the scale is given as 1 : 1200

(b) How many metres does 5 centimetres represent on this drawing?

..... metres  
(2)

**(Total for Question 14 is 4 marks)**

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