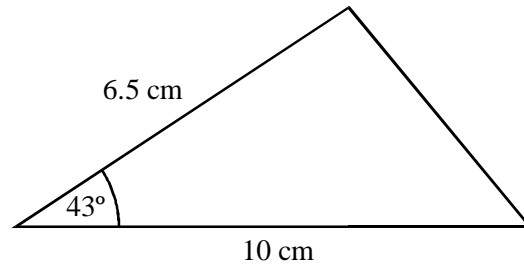
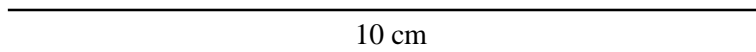


- In the space below, make an accurate drawing of this triangle.  
The base line has been drawn for you.



Not drawn accurately



(Total 2 marks)

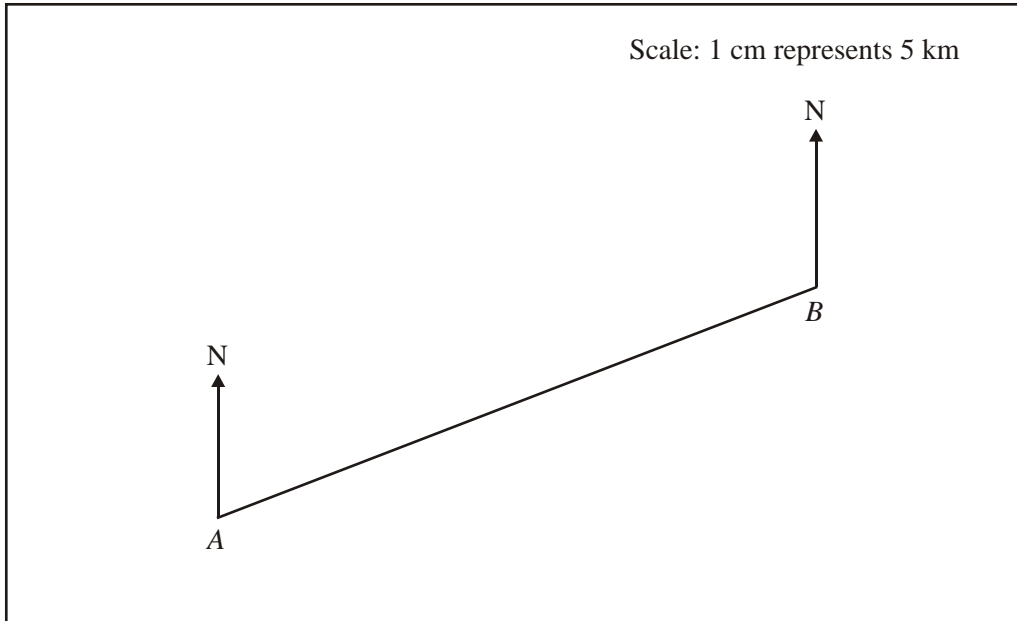
- In triangle  $ABC$ , the side  $AB$  is 7 cm.  
Angle  $A = 40^\circ$  and angle  $B = 95^\circ$ .

Make an accurate drawing of the triangle in the space below.  
The side  $AB$  has been drawn for you.



(Total 2 marks)

- The diagram shows the position of two towns  $A$  and  $B$ .



(a) Measure the length of  $AB$  in centimetres.

Answer .....cm

(1)

(b) Use the scale to work out the actual distance between the towns  $A$  and  $B$ .  
Give your answer in kilometres.

.....

Answer .....km

(2)

(c) Measure and write down the three-figure bearing of  $B$  from  $A$ .

Answer ..... °

(1)

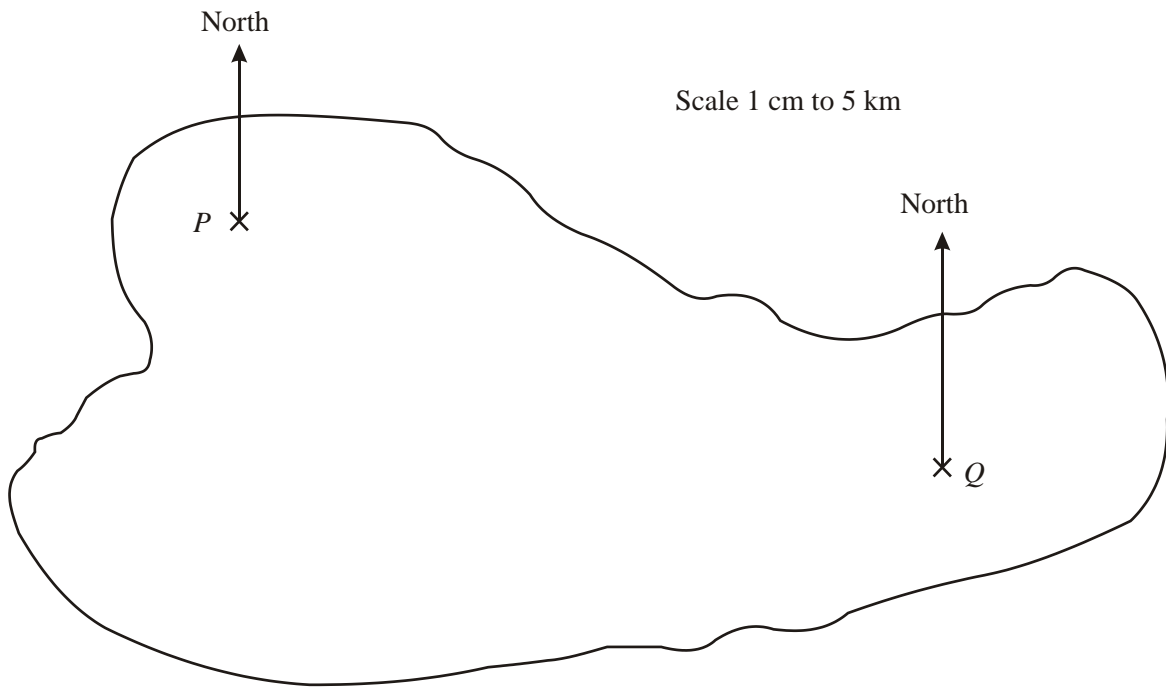
(d)  $C$  is due east of  $A$  and due south of  $B$ .

Mark the position of  $C$  on the diagram.

(2)

**(Total 6 marks)**

4. The map of an island is shown.



*P* and *Q* are the positions of two houses on the island.

(a) What is the bearing of *P* from *Q*?

.....

Answer .....°

(1)

(b) Calculate the actual distance from *P* to *Q* in kilometres.

.....

.....

Answer .....km

(2)

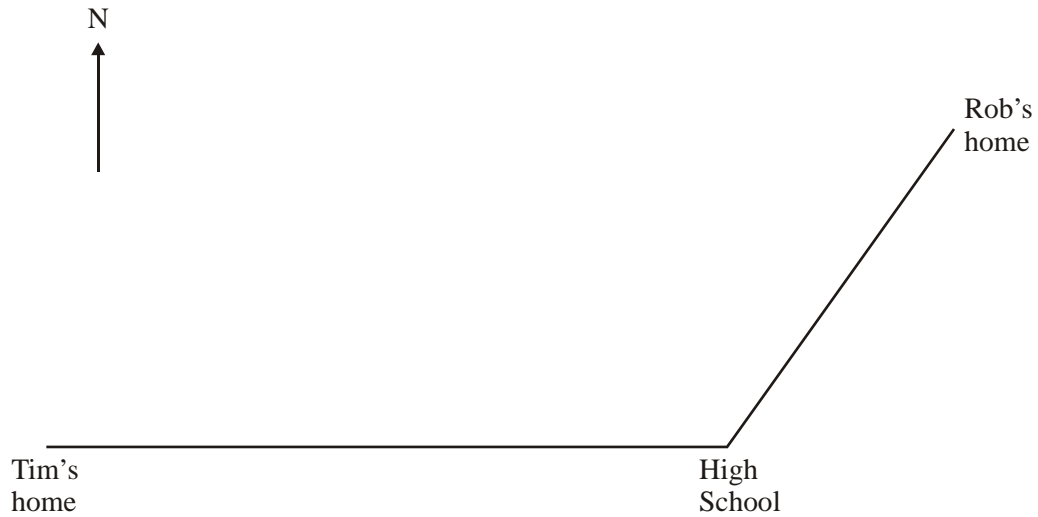
(c) A house is 20 km from *P* on a bearing of 130°. Mark the position of the house on the diagram with a **X**.

.....

(2)

(Total 5 marks)

5. Tim and Rob go to the High School. The scale drawing shows the positions of their homes and the High School.



Tim lives 2.25 km due west of the High School.

- (a) Use the diagram to work out the scale.

Answer 1 km is represented by ..... cm

(1)

- (b) What is the actual distance from Rob's home to the High School?

.....

Answer ..... km

(2)

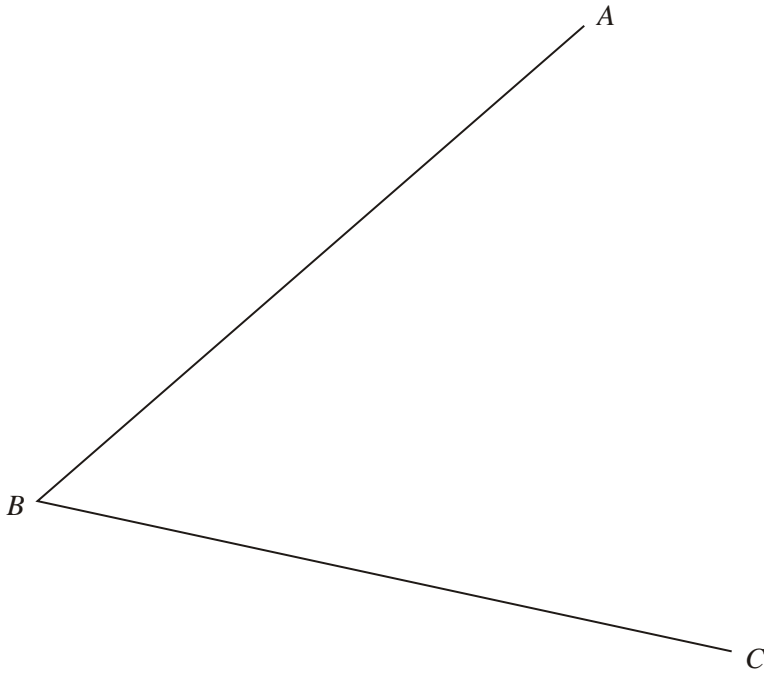
- (c) What is the bearing of Rob's home from the High School?

Answer .....

(1)

(Total 4 marks)

6. Using a ruler and compasses construct the bisector of angle  $ABC$ .



(Total 2 marks)

7. (a) The line  $LM$  is drawn below.



Use ruler and compasses to construct the perpendicular bisector of  $LM$ .  
You **must** show clearly all your construction arcs.

(2)

- (b) Complete the sentence. The perpendicular bisector of  $LM$  is the locus of points which are

.....

(1)

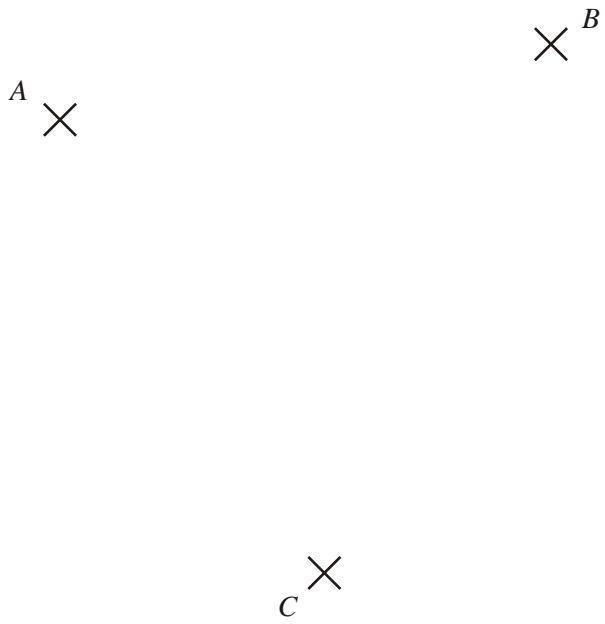
(Total 3 marks)

8. The diagram shows three towns  $A$ ,  $B$  and  $C$ .  
1 cm represents 2 km.

Show on the diagram the region which is less than 10 km from all three towns.

Bearings, Constructions & Loci

Scale: 1 cm represents 2 km



(Total 3 marks)