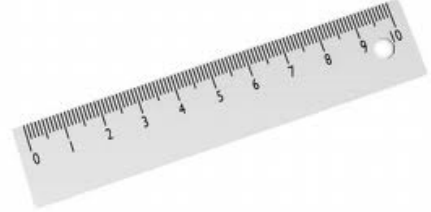
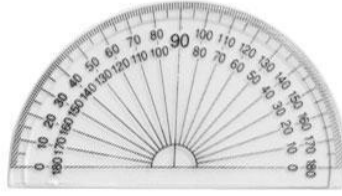
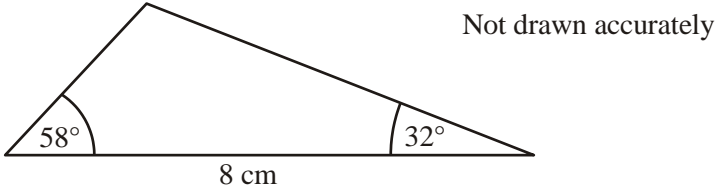


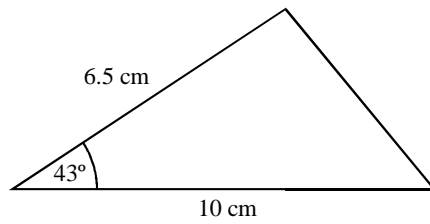
S8.4 Homework on Constructions and Loci

EQUIPMENT



Topic	Question	
<p>Constructing triangles</p>	<p>Here is a sketch of a triangle.</p>  <p style="text-align: right;">Not drawn accurately</p> <p style="text-align: center;">8 cm</p> <p>In the space below, make an accurate drawing of the triangle.</p> <p>(Total 3 marks)</p>	

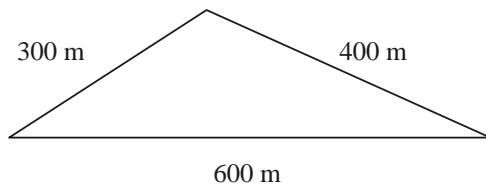
In the space below, make an accurate drawing of this triangle.



Not drawn accurately

(Total 2 marks)

A plot of land is in the shape of a triangle with sides 300 m, 400 m and 600 m.
The sketch shows the plot of land.



Not drawn accurately

Draw the triangle accurately, using a scale of 1 cm to 100 m.

(Total 3 marks)

Perpendicular bisector

The line LM is drawn below.

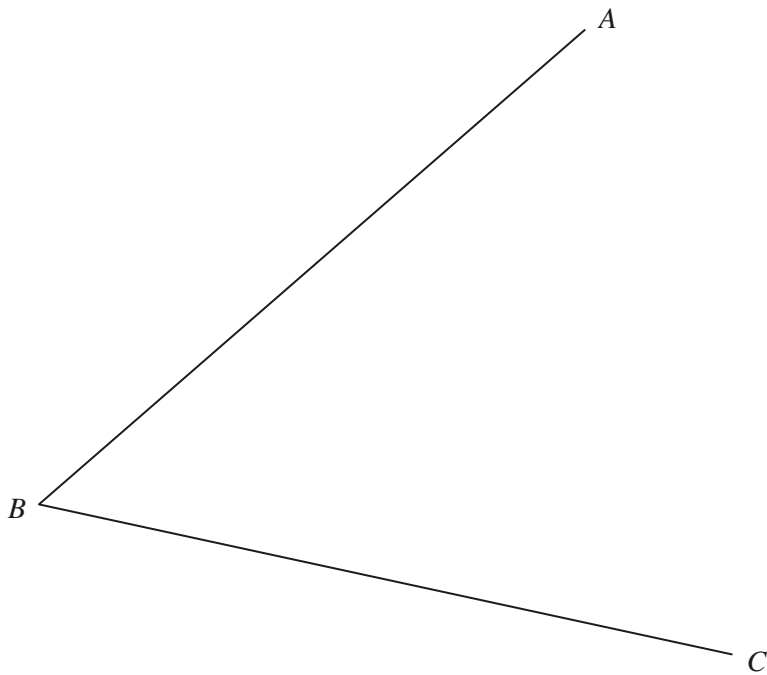


Use ruler and compasses to construct the perpendicular bisector of LM .
You **must** show clearly all your construction arcs.

(2)

Angle bisector

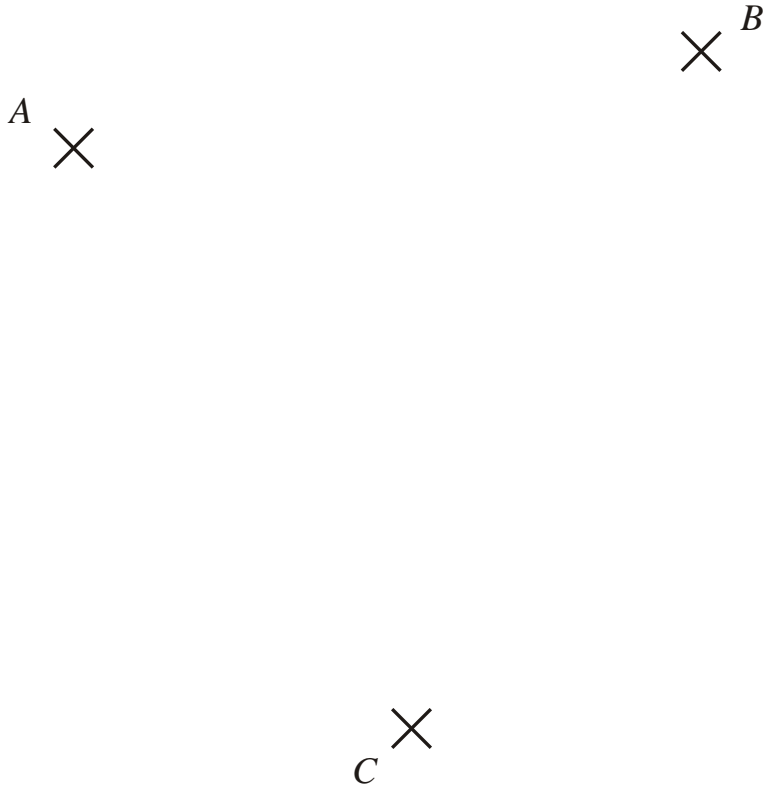
Using a ruler and compasses construct the bisector of angle ABC .



(Total 2 marks)

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

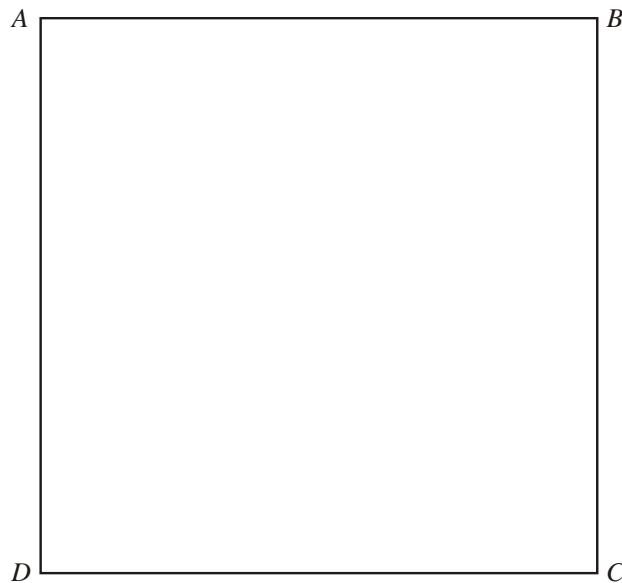
Show on the diagram the region which is less than 12 km from all three towns.



(Total 3 marks)

Scale: 1 cm represents 2 km

$ABCD$ is a square.



Show clearly the region inside the square that is both closer to the point D than to the point A , and closer to the side CD than the side AD .

(Total 3 marks)

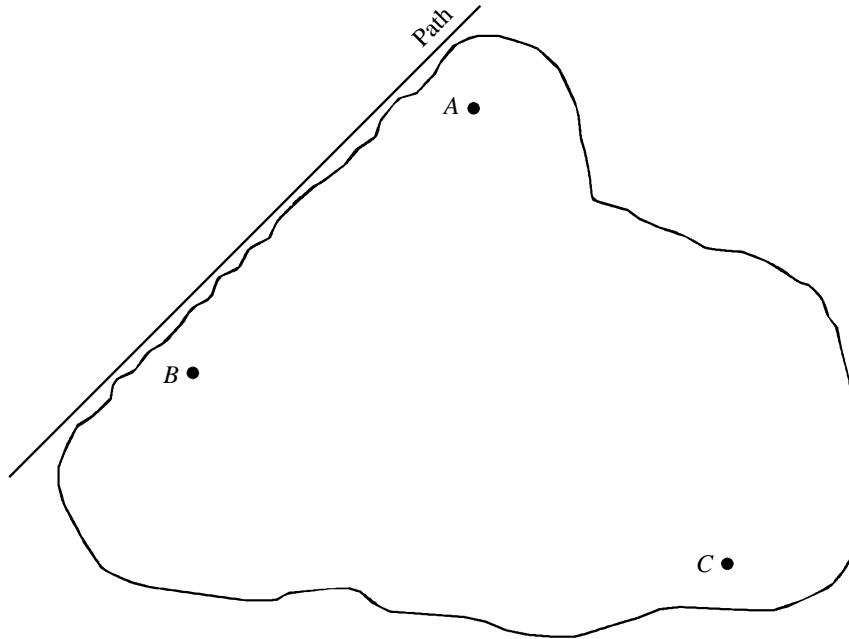
The map below shows three boats, *A*, *B* and *C*, on a lake.
Along one edge of the lake there is a straight path.

Treasure lies at the bottom of the lake.

The treasure is:

between 150 m and 250 m from *B*,
nearer to *A* than *C*,
more than 100 m from the path.

Scale: 1 cm represents 50m



Using a ruler and compasses only, shade the region in which the treasure lies.

You **must** show clearly all your construction arcs.

(Total 5 marks)

BEARINGS

A is due North of B .

The bearing of C from A is 115° .

The bearing of C from B is 075° .



Mark the position of C on the diagram.

(Total 3 marks)

THINKING

Using a ruler and compasses only, construct an angle of 60°
Show all your construction lines and arcs.

(2)