

# Loci and Construction

## Question Paper

Level	GCSE
Subject	Maths
Exam Board	Edexcel GCSE
Topic	Loci and Construction
Grade Level	Grade 4
Booklet	Question Paper

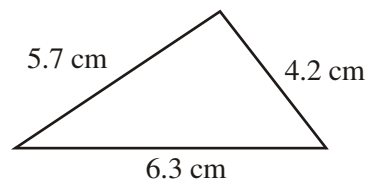
**Time Allowed:** 47 minutes

**Score:** /39

**Percentage:** /100

**Grade Boundaries:**

1. Here is a sketch of a triangle.



In the space below, use ruler and compasses to **construct** this triangle accurately. You must show all construction lines.

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(3 marks)

2.

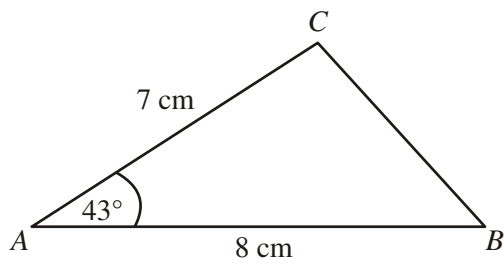


Diagram **NOT**  
accurately drawn

$ABC$  is a triangle.

$AB = 8$  cm.

$AC = 1$  cm.

Angle  $A = 43^\circ$ .

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

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**(3 marks)**

3. The diagram shows a sketch of triangle  $ABC$ .

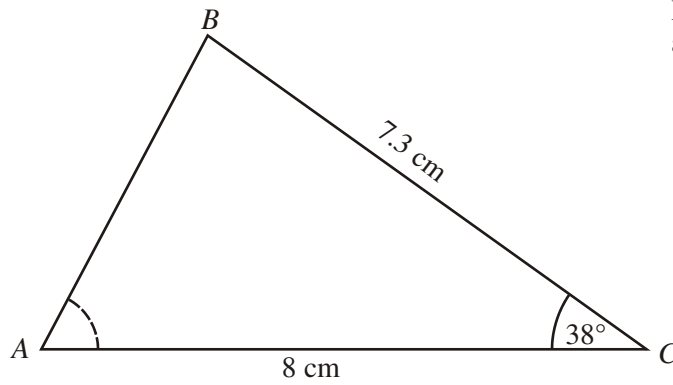


Diagram **NOT** accurately drawn

$BC = 7.3\text{ cm}$ .  
 $AC = 8\text{ cm}$ .  
Angle  $C = 38^\circ$ .

(a) Make an accurate drawing of triangle  $ABC$ .

(3)

(b) Measure the size of angle  $A$  on your diagram.

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

(1)

**(4 marks)**

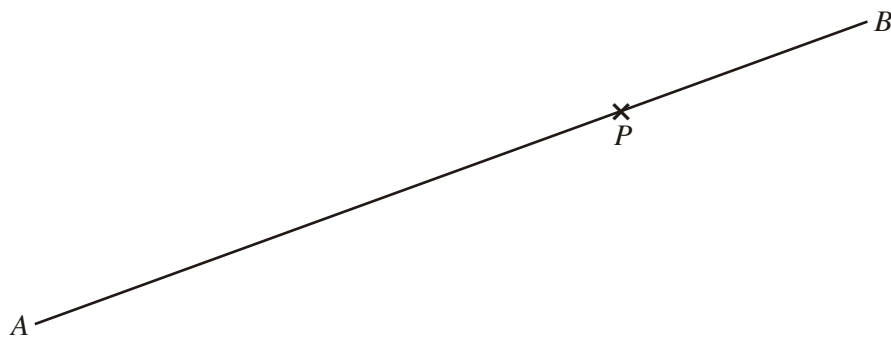
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4. In the space below, use ruler and compasses to **construct** an equilateral triangle with sides of length 6 centimetres.  
You must show all your construction lines.

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**(3 marks)**

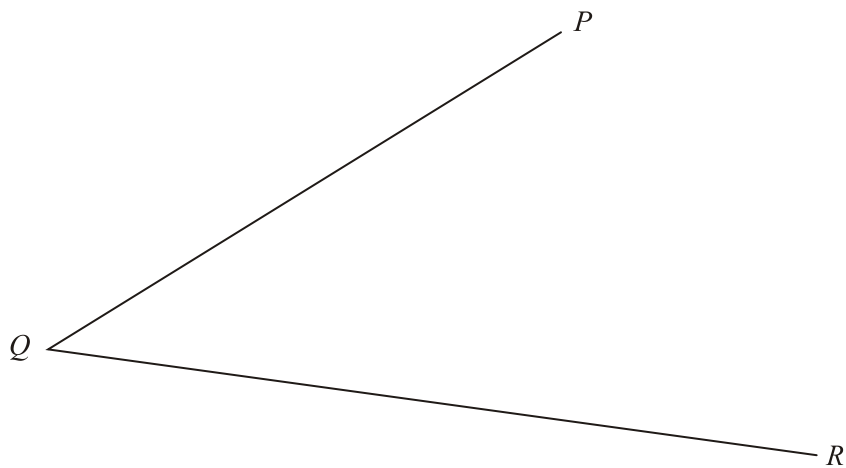
5. Use the ruler and compasses to **construct** the perpendicular to the line segment  $AB$  that passes through the point  $P$ .  
You must show all construction lines.



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(3 marks)

- 6.



Use ruler and compasses to **construct** the bisector of angle  $PQR$ .  
You must show all your construction lines.

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(3 marks)

7.

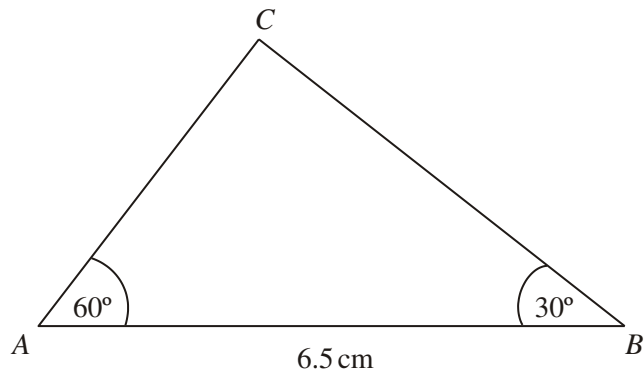


Diagram **NOT** accurately drawn

(a) Make an accurate drawing of triangle *ABC*.

(3)

(b) Measure the size of the angle at *C* in your triangle.

.....°

(1)

**(4 marks)**

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8.

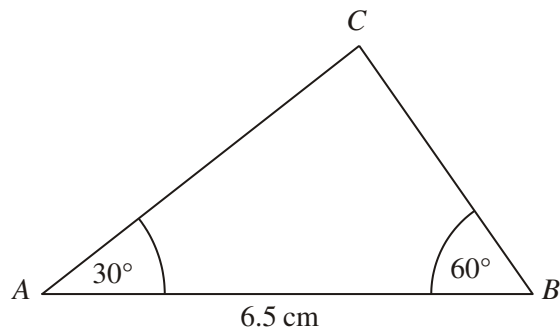


Diagram NOT accurately drawn

- (a) Make an accurate drawing of this triangle.

(2)

- (b) Measure the length of the line AC on your drawing.  
You must state the units.

.....

(2)

The size of the angle in the triangle at C is 90°.

- (c) Write down the mathematical name for this type of angle.

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(1)

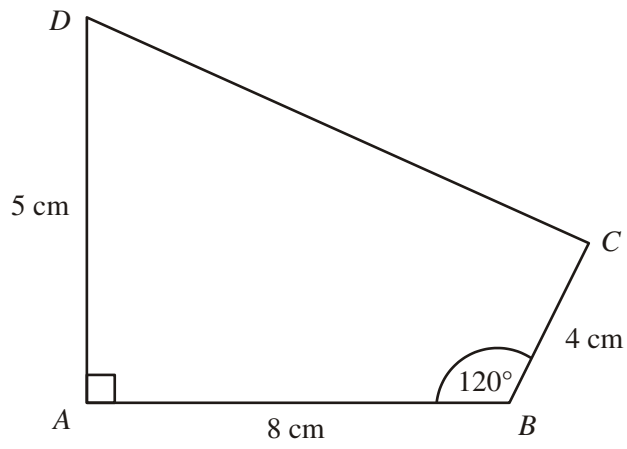
**(5 marks)**

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9.

Diagram **NOT**  
accurately drawn



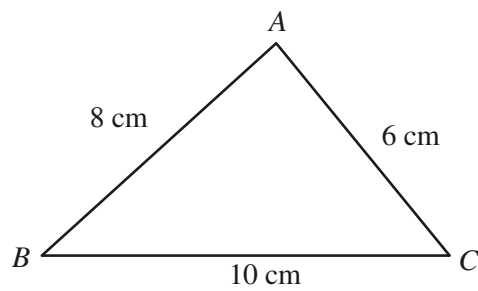
Make an accurate drawing of the quadrilateral  $ABCD$  in the space below.

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**(4 marks)**

10.

Diagram **NOT** accurately drawn



$ABC$  is a triangle.

$AB = 8$  cm.

$AC = 6$  cm.

$BC = 10$  cm.

Use ruler and compasses to construct an accurate drawing of triangle  $ABC$ .

You must show all your construction lines.

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**(3 marks)**

11. Here is a sketch of a rhombus.

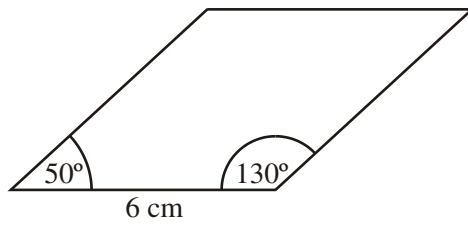


Diagram **NOT** accurately drawn

The rhombus has a side of length 6 cm.

One angle of the rhombus is  $50^\circ$ .

Another angle of the rhombus is  $130^\circ$ .

Use a ruler and a protractor to make an accurate drawing of the rhombus.

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**(4 marks)**