



# Constructions

Print this booklet on full size A4.

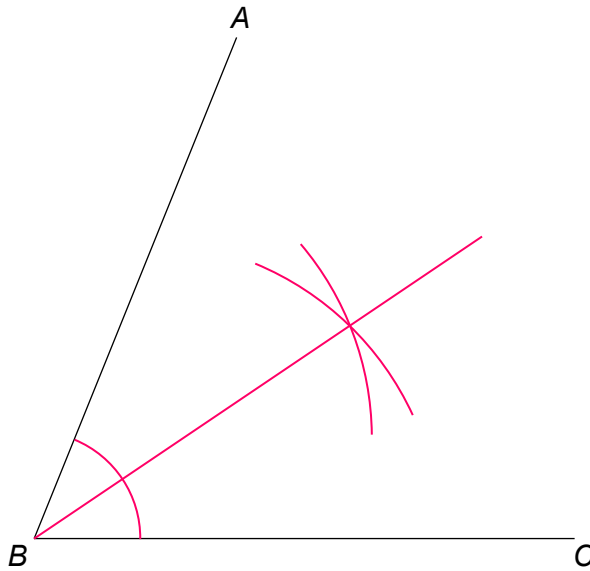
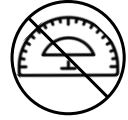


**REVISE THIS TOPIC**



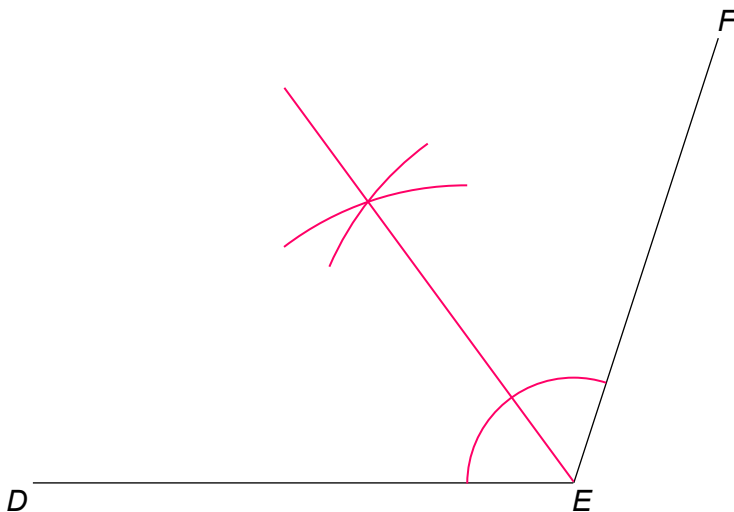
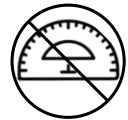
1 Use a ruler and compasses to construct the bisector of angle  $ABC$ .

[2 marks]



2 Use a ruler and compasses to construct the bisector of angle  $DEF$ .

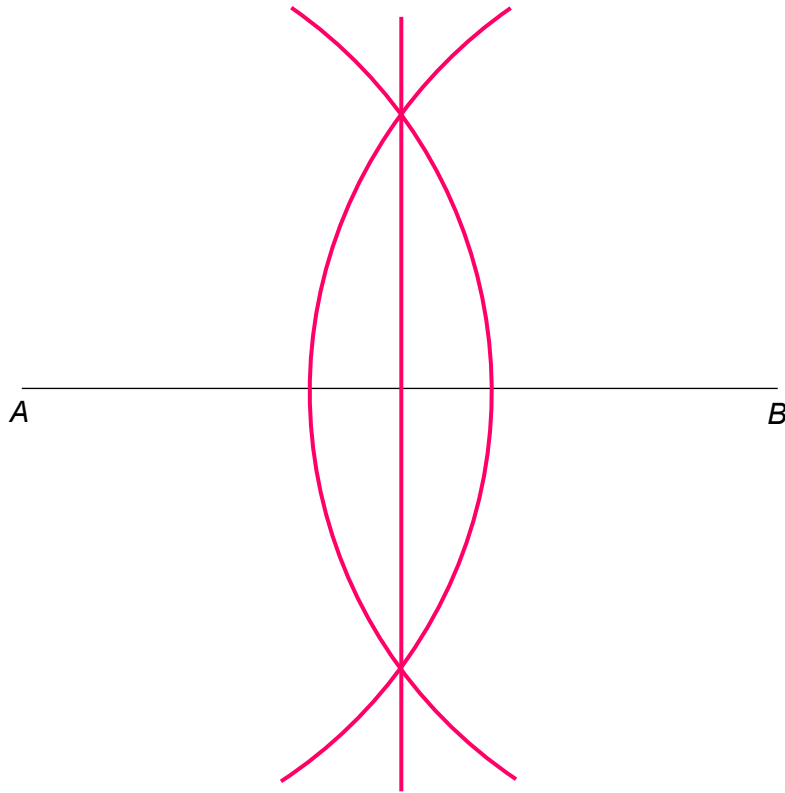
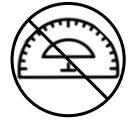
[2 marks]





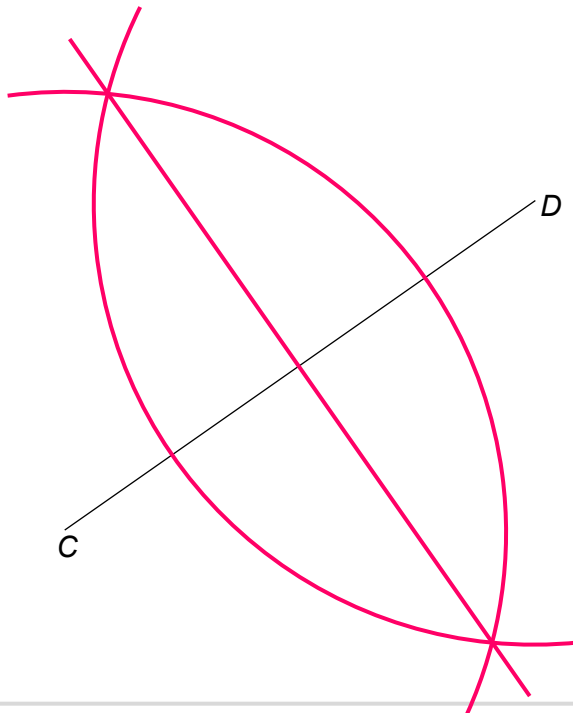
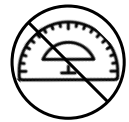
3 Use a ruler and compasses to construct the perpendicular bisector of line  $AB$ .

[2 marks]



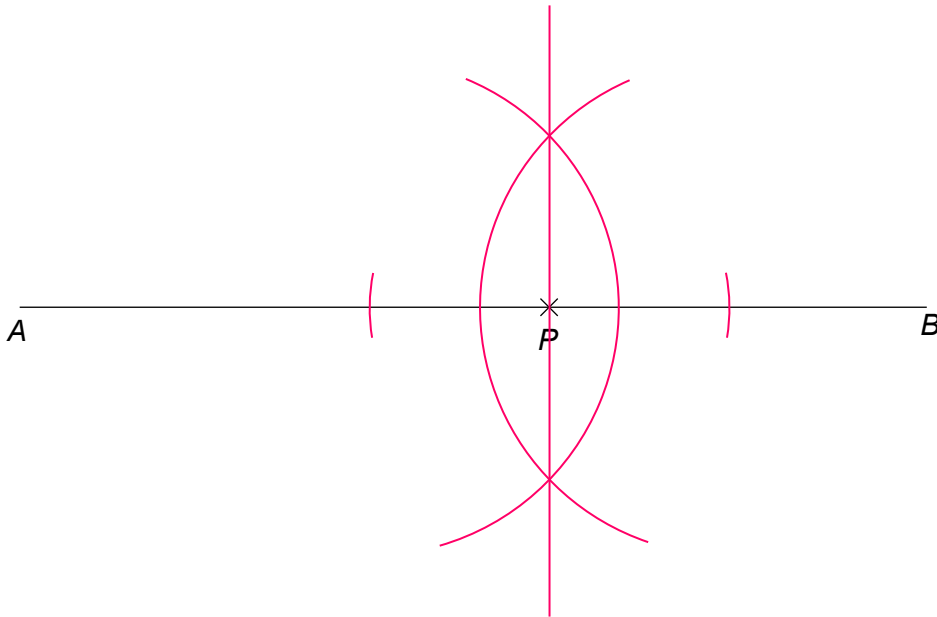
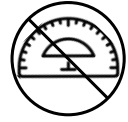
4 Use a ruler and compasses to construct the perpendicular bisector of line  $CD$ .

[2 marks]

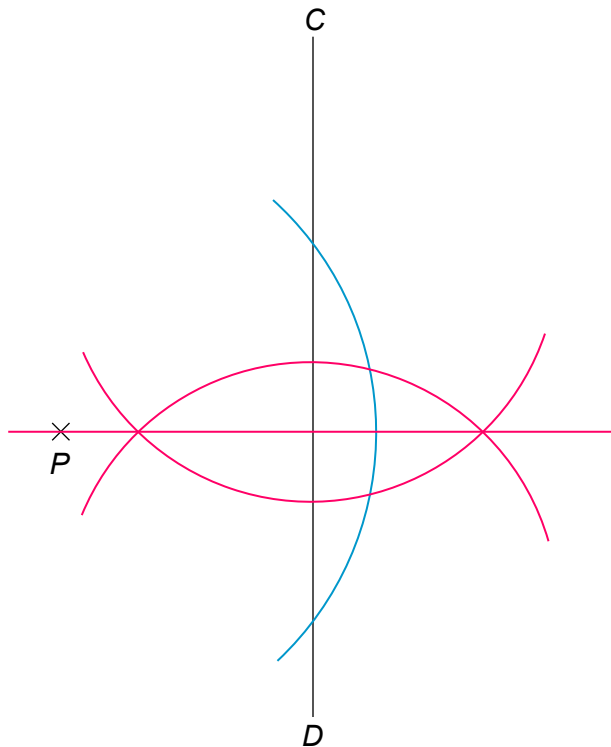
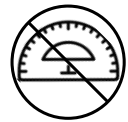




- 5 The point  $P$  lies on the line  $AB$ .  
Use a ruler and compasses to construct an angle of  $90^\circ$  at  $P$ .  
You must show all your construction lines. [2 marks]

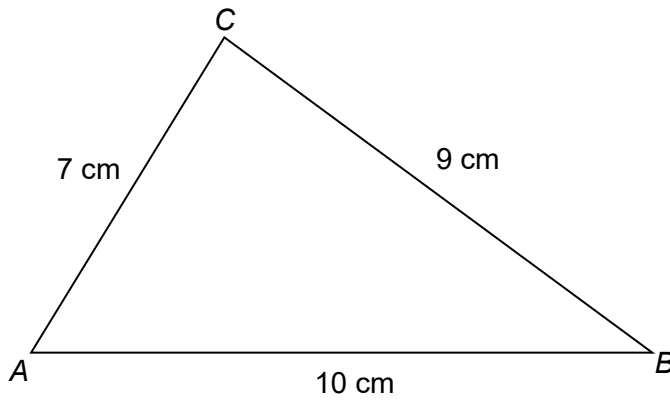
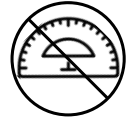


- 6 Use a ruler and compasses to construct the line from the point  $P$  perpendicular to the line  $CD$ .  
[2 marks]





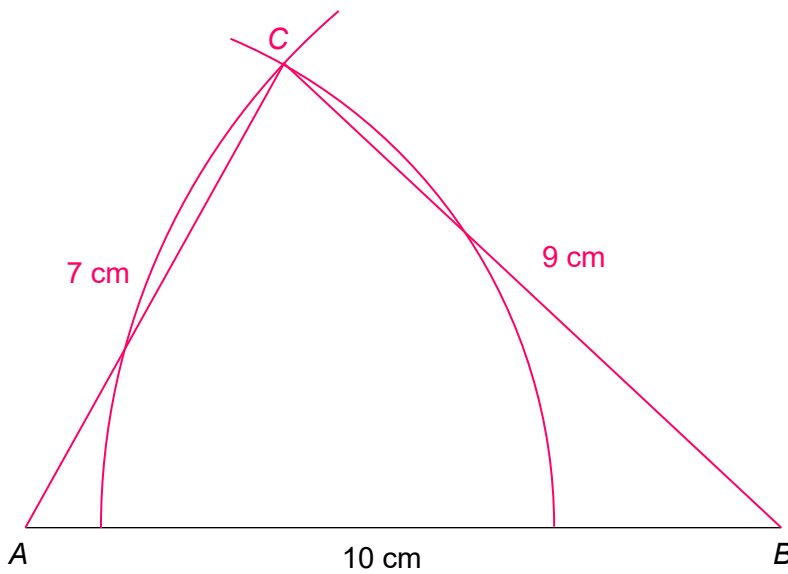
7 A sketch of triangle  $ABC$  is shown.



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

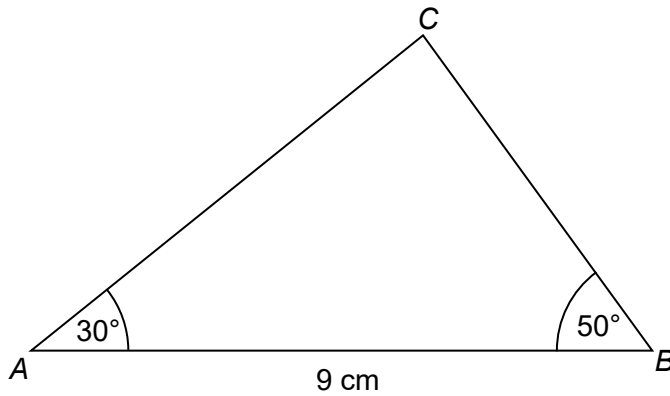
You should use only a ruler and compasses for this question.

[2 marks]

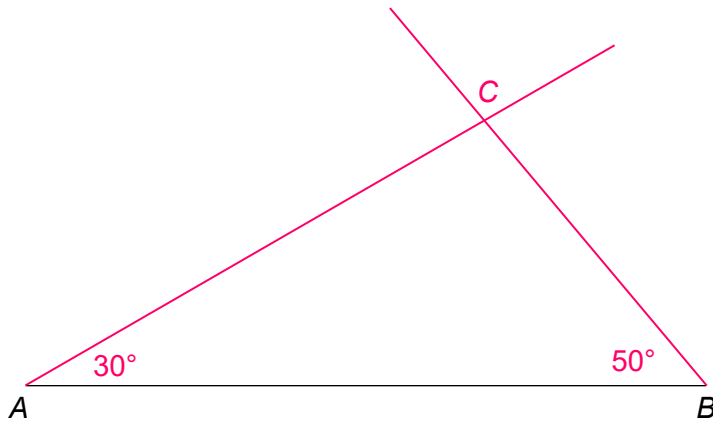




8 A sketch of triangle  $ABC$  is shown.

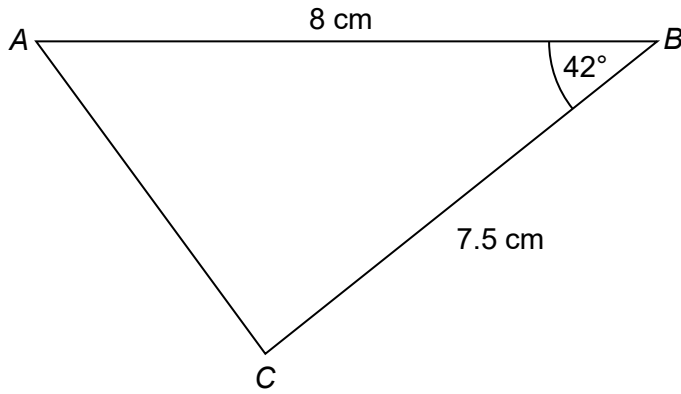


In the space below, complete an accurate drawing of triangle  $ABC$ . [2 marks]

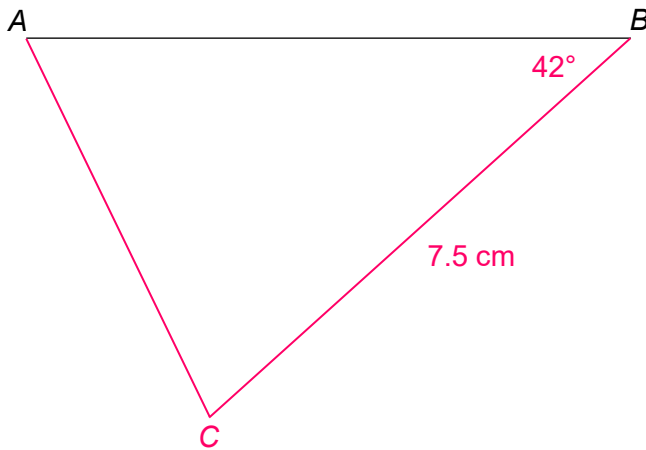




9 A sketch of triangle  $ABC$  is shown.



In the space below, complete an accurate drawing of triangle  $ABC$ . [2 marks]

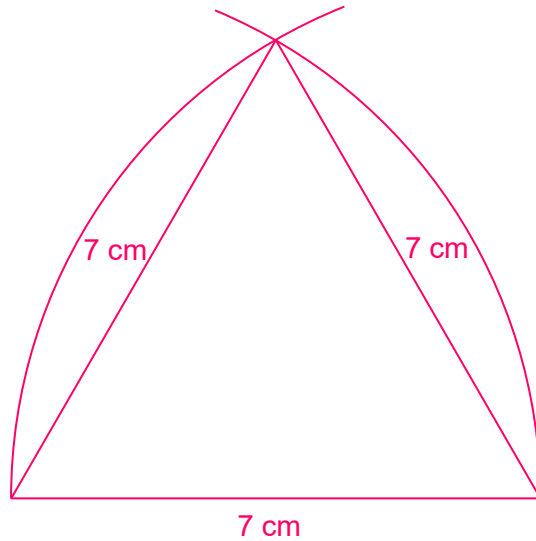
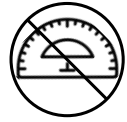




10

Using a ruler and compasses only, construct an equilateral triangle with side length 7 cm.

[2 marks]



11

$ABC$  is an isosceles triangle.

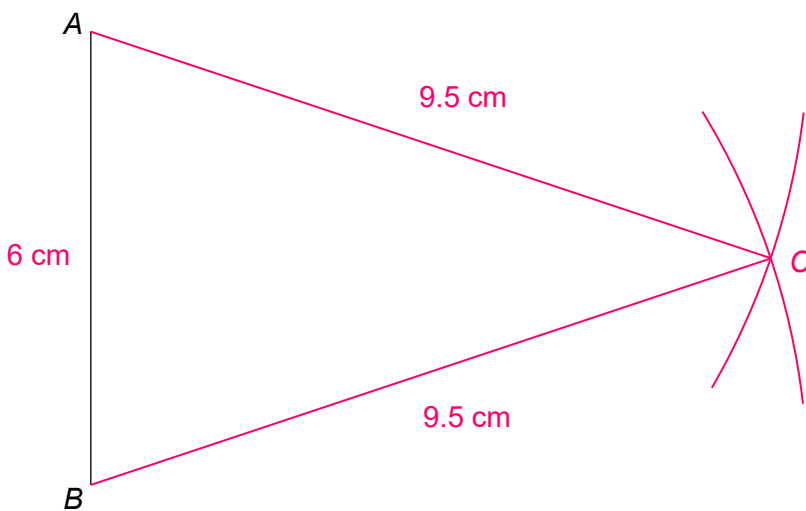
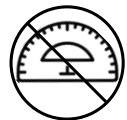
$AB = 6\text{ cm}$

$AC = BC = 9.5\text{ cm}$

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

You should use only a ruler and compasses for this question.

[2 marks]



Turn over ►



12

$ABC$  is a triangle.

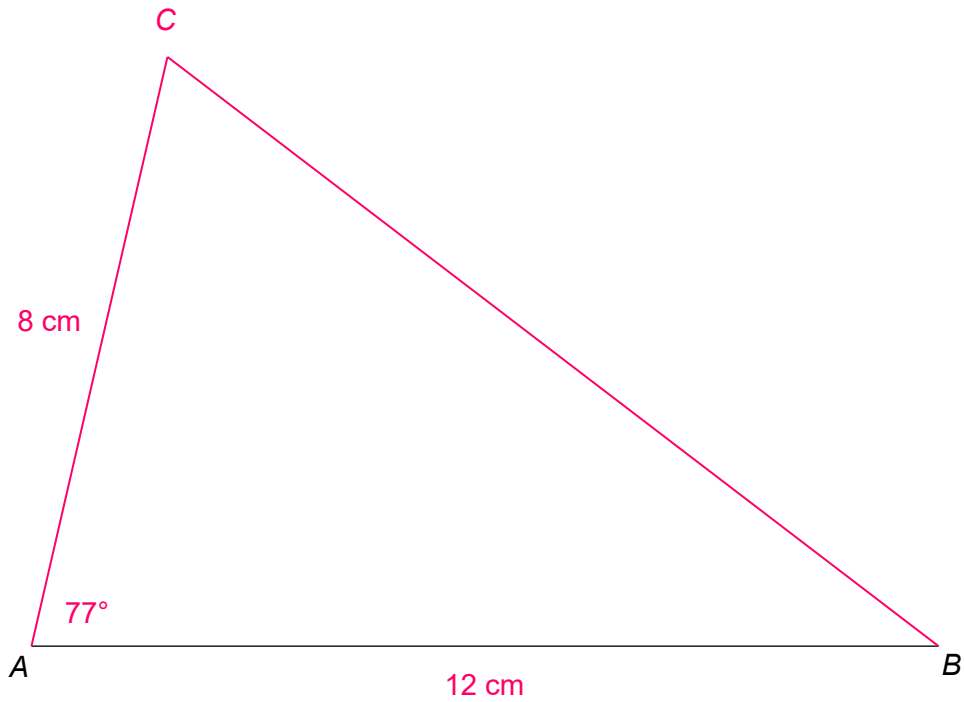
$AB = 12 \text{ cm}$

Angle  $BAC = 77^\circ$

$AC = 8 \text{ cm}$

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

[2 marks]





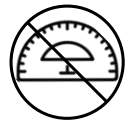
13

$ABC$  is a triangle.

$AB = 8$  cm

Angle  $ABC = 60^\circ$

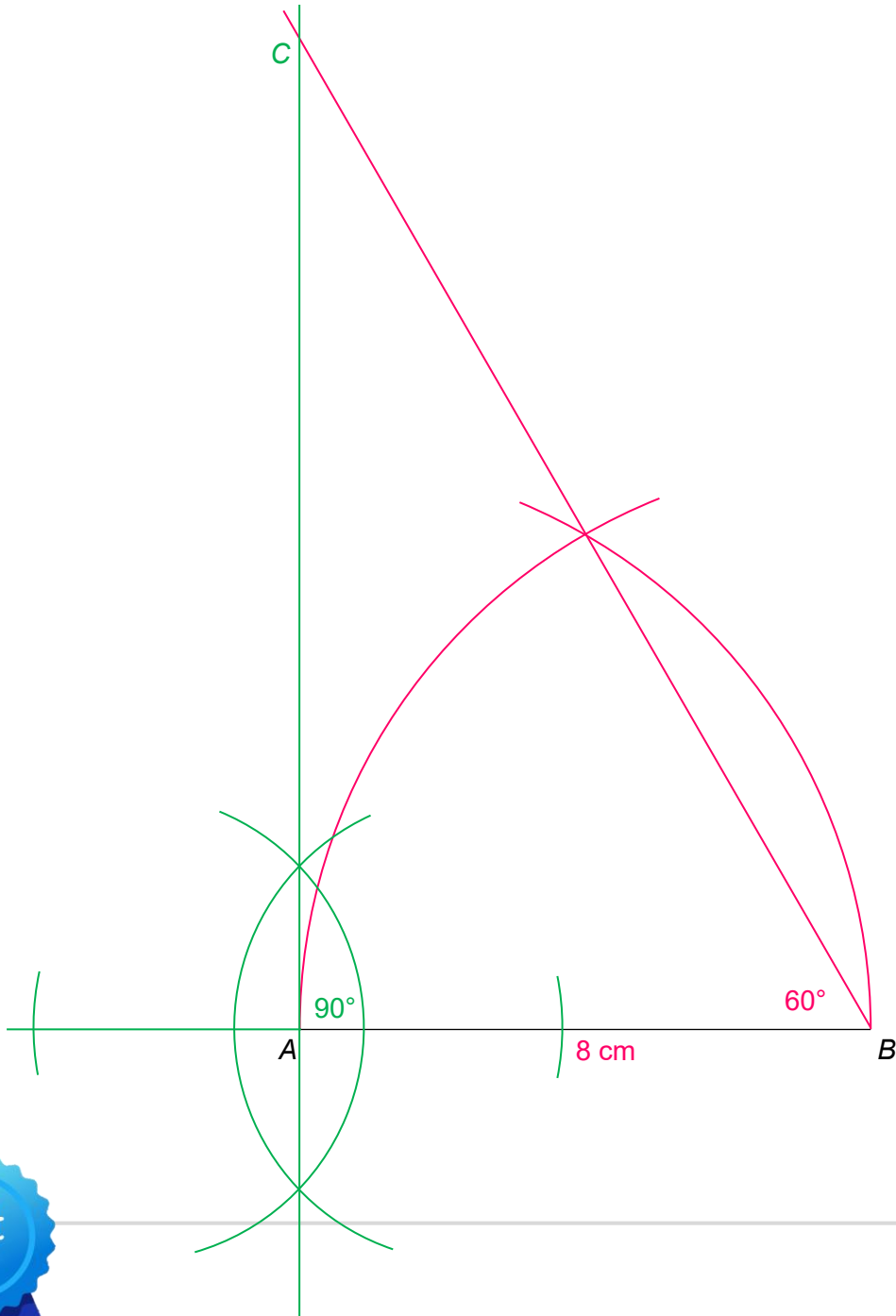
Angle  $CAB = 90^\circ$



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

You should use only a ruler and compasses for this question.

[4 marks]



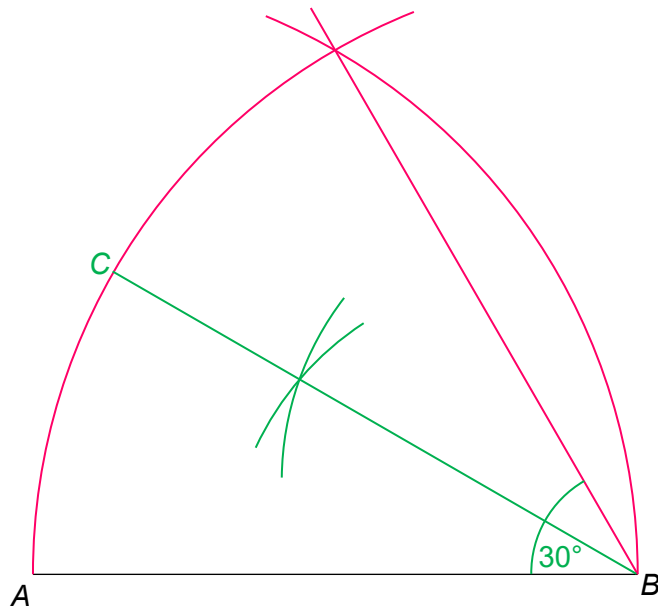
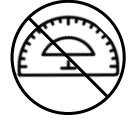


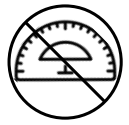
14

Angle  $ABC = 30^\circ$

Use a ruler and compasses to construct angle  $ABC$ .

[4 marks]





15  $ABC$  is an isosceles triangle.

$AB = 8 \text{ cm}$   
 $AC = BC$

The area of triangle  $ABC$  is  $40 \text{ cm}^2$

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

You should use only a ruler and compasses for this question.

[4 marks]

$$\frac{1}{2} \times 8 \times h = 40$$

$$4h = 40$$

$$h = 10 \text{ cm}$$

