

**Sine and Cos Rule and Area Past Paper Questions Edexcel Maths GCSE**  
**Higher Calculator**

1.

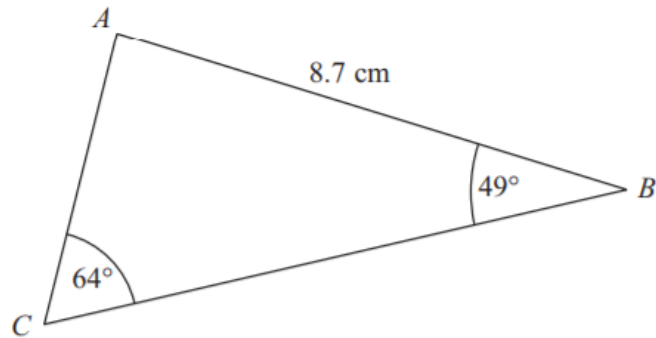


Diagram **NOT**  
accurately drawn

$ABC$  is a triangle.

$AB = 8.7$  cm.

Angle  $ABC = 49^\circ$ .

Angle  $ACB = 64^\circ$ .

Calculate the area of triangle  $ABC$ .

Give your answer correct to 3 significant figures.

2.

$ABC$  is a triangle.

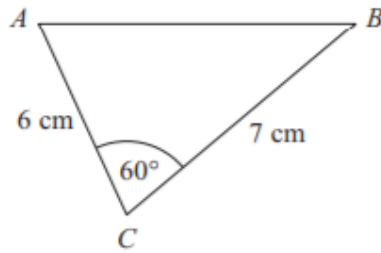


Diagram NOT accurately drawn

- (a) Work out the area of triangle  $ABC$ .  
Give your answer correct to 3 significant figures.

.....  $\text{cm}^2$   
(2)

- (b) Work out the length of the side  $AB$ .  
Give your answer correct to 3 significant figures.

.....  $\text{cm}$   
(3)

(Total for Question 2 is 5 marks)

3.

$ABCD$  is a parallelogram.

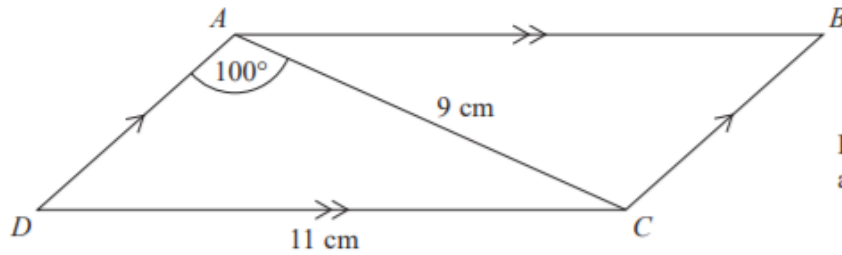


Diagram **NOT** accurately drawn

$AC = 9\text{ cm}$   
 $DC = 11\text{ cm}$   
 Angle  $DAC = 100^\circ$

Calculate the area of the parallelogram.  
 Give your answer correct to 3 significant figures.

.....  $\text{cm}^2$

(Total for Question 3 is 5 marks)

4.

Here is a parallelogram.

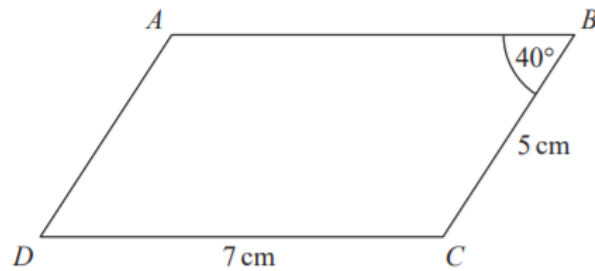


Diagram **NOT** accurately drawn

$DC = 7 \text{ cm}$   
 $CB = 5 \text{ cm}$   
 Angle  $ABC$  is  $40^\circ$

Work out the area of the parallelogram.  
 Give your answer correct to 1 decimal place.

.....  $\text{cm}^2$

(Total for Question 4 is 3 marks)

5.

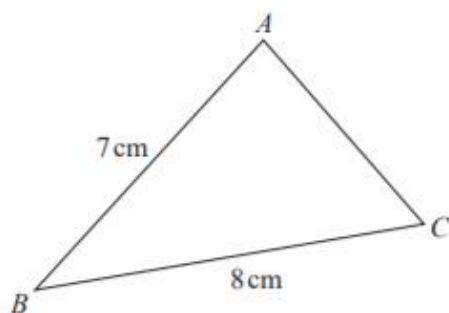


Diagram **NOT**  
accurately drawn

$ABC$  is an acute-angled triangle.

$BA = 7$  cm

$BC = 8$  cm

The area of triangle  $ABC$  is  $18$  cm<sup>2</sup>.

Work out the size of angle  $BAC$ .

Give your answer correct to 3 significant figures.

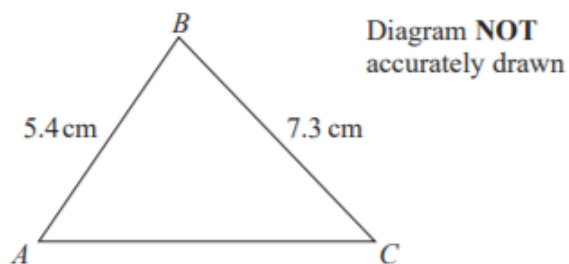
You must show all your working.

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(Total for Question 25 is 6 marks)

6.

$ABC$  is an acute angled triangle.



The area of triangle  $ABC$  is  $19 \text{ cm}^2$ .

Work out the size of angle  $ACB$ .

Give your answer correct to 3 significant figures.

.....  
(Total for Question 7 is 6 marks)

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7.

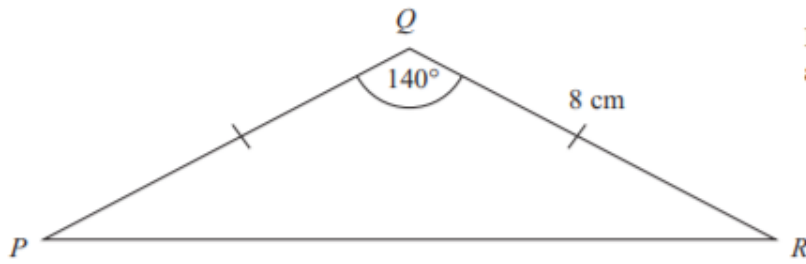


Diagram **NOT** accurately drawn

Calculate the length of  $PR$ .  
Give your answer correct to 3 significant figures.

..... cm

(Total for Question 20 is 3 marks)

8.

The diagram shows the triangle  $PQR$ .

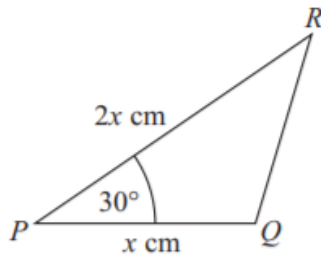


Diagram **NOT** accurately drawn

$$PQ = x \text{ cm}$$

$$PR = 2x \text{ cm}$$

$$\text{Angle } QPR = 30^\circ$$

The area of triangle  $PQR = A \text{ cm}^2$

Show that  $x = \sqrt{2A}$

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(Total for Question 25 is 3 marks)



9.

The diagram shows triangle  $LMN$ .

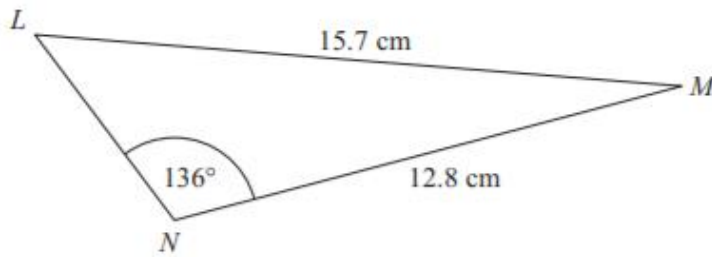


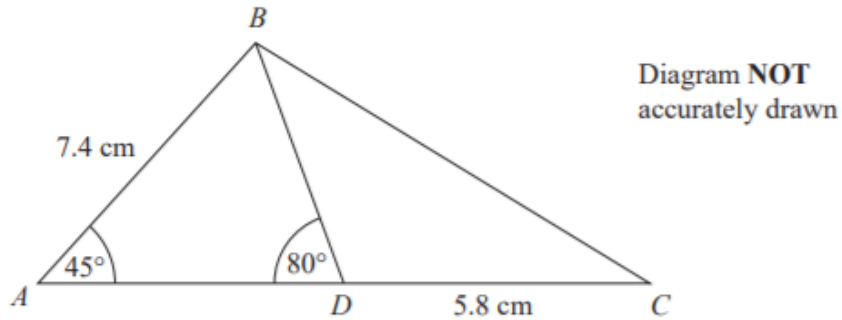
Diagram **NOT** accurately drawn

Calculate the length of  $LN$ .  
Give your answer correct to 3 significant figures.

..... cm

(Total for Question 9 is 5 marks)

10.



$ABC$  is a triangle.  
 $D$  is a point on  $AC$ .  
 Angle  $BAD = 45^\circ$   
 Angle  $ADB = 80^\circ$   
 $AB = 7.4$  cm  
 $DC = 5.8$  cm

Work out the length of  $BC$ .  
 Give your answer correct to 3 significant figures.

..... cm

(Total for Question 10 is 5 marks)

11.

$ABC$  is a triangle.

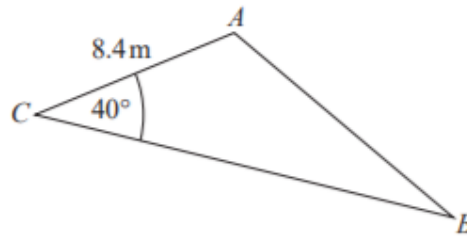


Diagram NOT accurately drawn

$AC = 8.4\text{ m}$

Angle  $ACB = 40^\circ$

The area of the triangle =  $100\text{ m}^2$ .

Work out the length of  $AB$ .

Give your answer correct to 3 significant figures.

You must show all your working.

..... m

(Total for Question 2 is 5 marks)