Name:_____

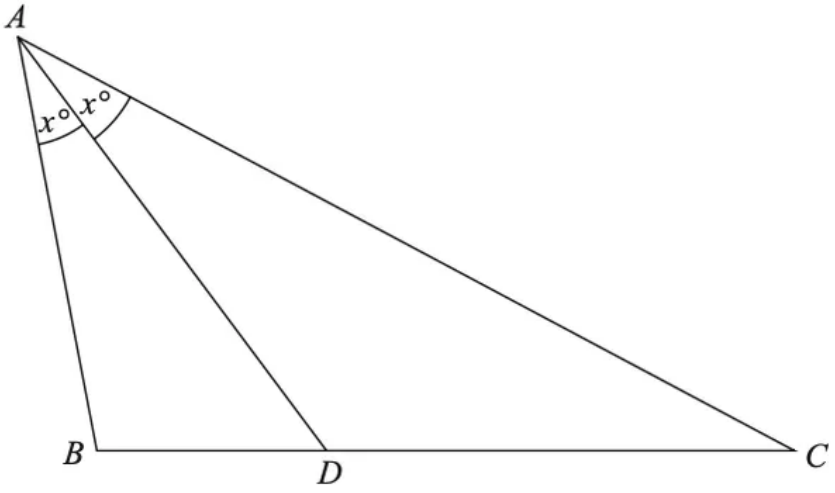
GCSE (1 - 9) The Sine Rule	Solutions:

These questions are compiled from *released* Pearson Edexcel GCSE maths exam papers
They contain exam questions from up until the ***November 2021*** exam series
More recent exam papers do exist but are withheld for mock exams
As new exam papers are released these worksheets will gradually be updated
The ***most current*** version of these worksheets will always be available at: kennethstafford.co.uk
These worksheets were made using examq.co.uk

Question	Where the question appeared
1	Edexcel, GCSE, Autumn 2021, Paper 3H, Q23
2	Edexcel, GCSE, Autumn 2020, Paper 2H, Q13
3	Edexcel, GCSE, Autumn 2019, Paper 3H, Q18
4	Edexcel, GCSE, Summer 2019, Paper 3H, Q23
5	Edexcel, GCSE, Autumn 2018, Paper 3H, Q16
6	Edexcel, GCSE, Summer 2018, Paper 3H, Q17
7	Edexcel, GCSE, Autumn 2017, Paper 3H, Q17

1

ABC is a triangle.



D is the point on BC such that angle BAD = angle $DAC = x°$

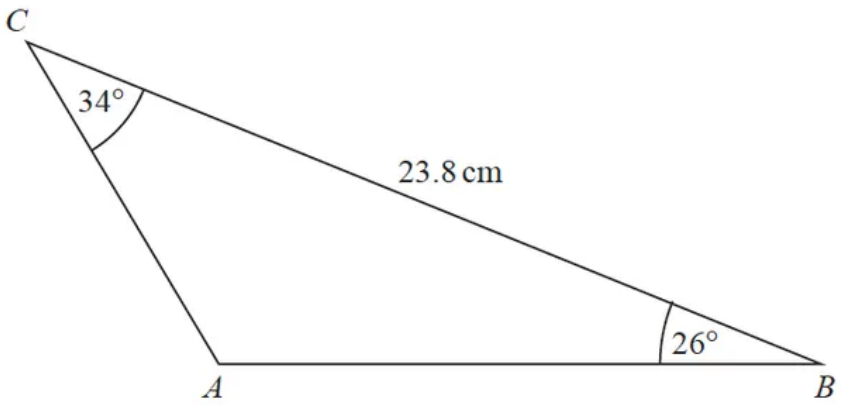
Prove that $\frac{AB}{BD} = \frac{AC}{DC}$

(Total for Question 23 is 4 marks)

[Edexcel, GCSE, Autumn 2021, Paper 3H, Q23]

2

Here is triangle ABC.



Work out the length of AB.
Give your answer correct to 1 decimal place.

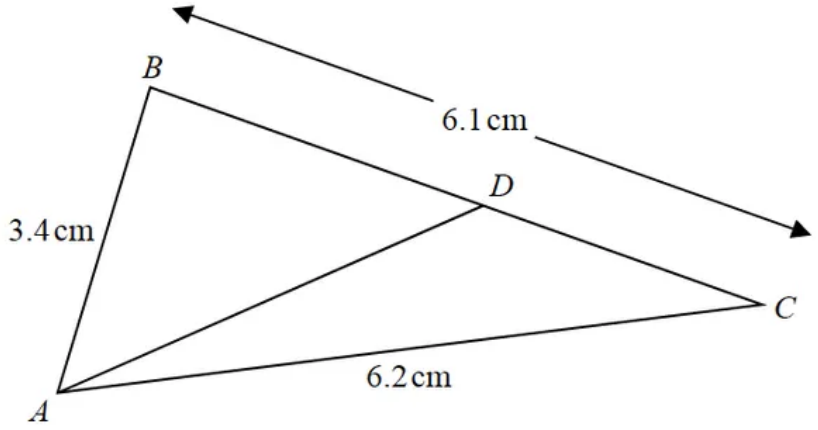
..... cm

(Total for Question 13 is 3 marks)

[Edexcel, GCSE, Autumn 2020, Paper 2H, Q13]

3

The diagram shows triangle ABC.



$AB = 3.4\,\text{cm}$ $AC = 6.2\,\text{cm}$ $BC = 6.1\,\text{cm}$

D is the point on BC such that

$$\text{size of angle } DAC = \frac{2}{5} \times \text{ size of angle } BCA$$

Calculate the length DC.
Give your answer correct to 3 significant figures.
You must show all your working.

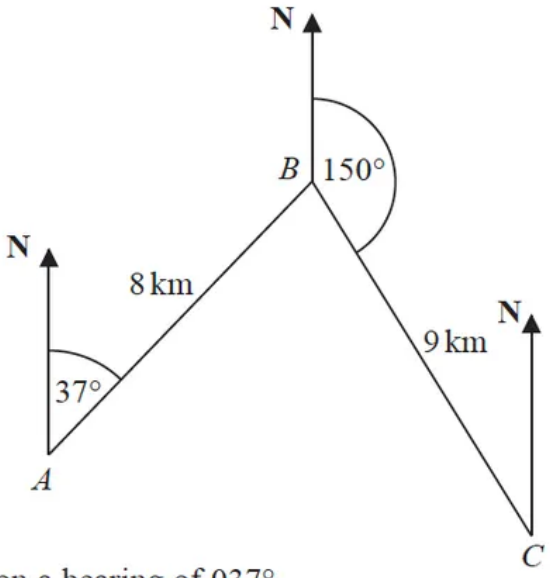
..... cm

(Total for Question 18 is 5 marks)

[Edexcel, GCSE, Autumn 2019, Paper 3H, Q18]

4

The diagram shows the positions of three towns, Acton (A), Barston (B) and Chorlton (C).



Barston is 8 km from Acton on a bearing of 037°
Chorlton is 9 km from Barston on a bearing of 150°

Find the bearing of Chorlton from Acton.
Give your answer correct to 1 decimal place.
You must show all your working.

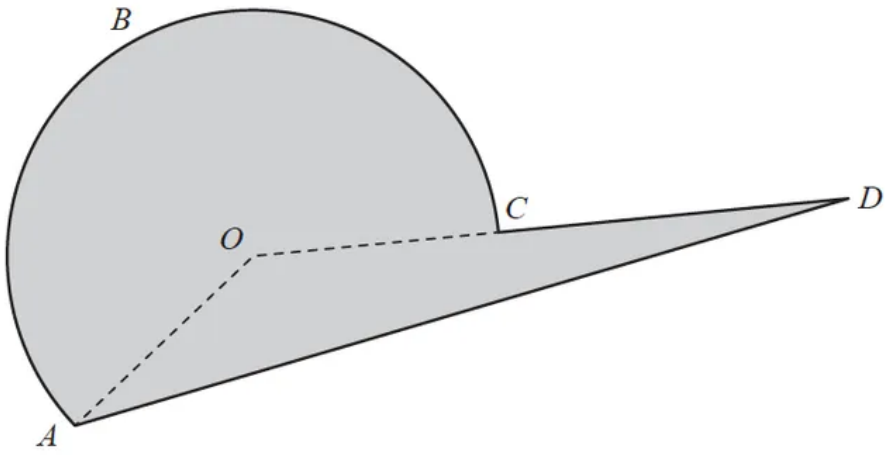
.....°

(Total for Question 23 is 5 marks)

[Edexcel, GCSE, Summer 2019, Paper 3H, Q23]

5

Here is a shaded shape $ABCD$.



The shape is made from a triangle and a sector of a circle, centre O and radius 6 cm.
OCD is a straight line.

$AD = 14$ cm
Angle $AOD = 140°$
Angle $OAD = 24°$

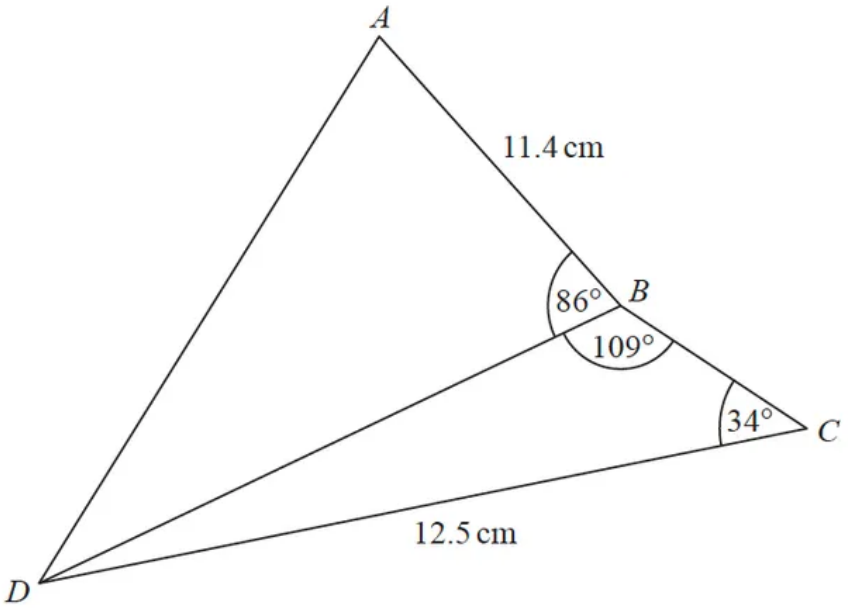
Calculate the perimeter of the shape.
Give your answer correct to 3 significant figures.

..... cm

(Total for Question 16 is 5 marks)

[Edexcel, GCSE, Autumn 2018, Paper 3H, Q16]

6



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

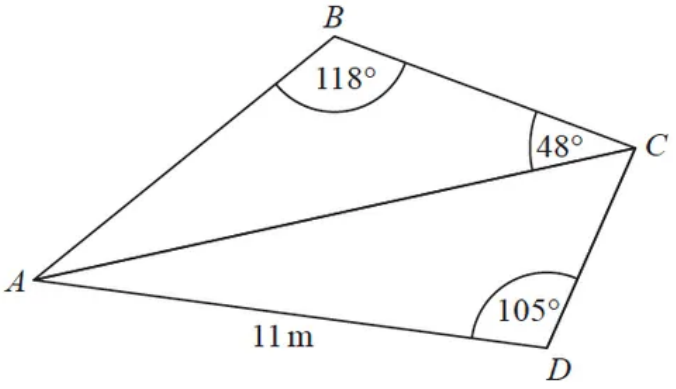
..... cm

(Total for Question 17 is 5 marks)

[Edexcel, GCSE, Summer 2018, Paper 3H, Q17]

7

ABC and *ADC* are triangles.



The area of triangle *ADC* is 56 m^2

Work out the length of *AB*.
Give your answer correct to 1 decimal place.

..... m

(Total for Question 17 is 5 marks)

[Edexcel, GCSE, Autumn 2017, Paper 3H, Q17]