

Write your name here

Surname	Other names
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**In the style of:** **Edexcel GCSE**

Centre Number	Candidate Number									
<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>						<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>				

# Mathematics A

## Locus and Constructions

Higher Tier

Past Paper Style Questions Arranged by Topic	Paper Reference <b>1MA0/2H</b>
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**You must have:** Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser, calculator. Tracing paper may be used.

	Total Marks
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### Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided  
– *there may be more space than you need.*
- **Calculators may be used.**



### Information

- The total mark for this paper is 100
- The marks for **each** question are shown in brackets  
– *use this as a guide as to how much time to spend on each question.*
- Questions labelled with an **asterisk** (\*) are ones where the quality of your written communication will be assessed.

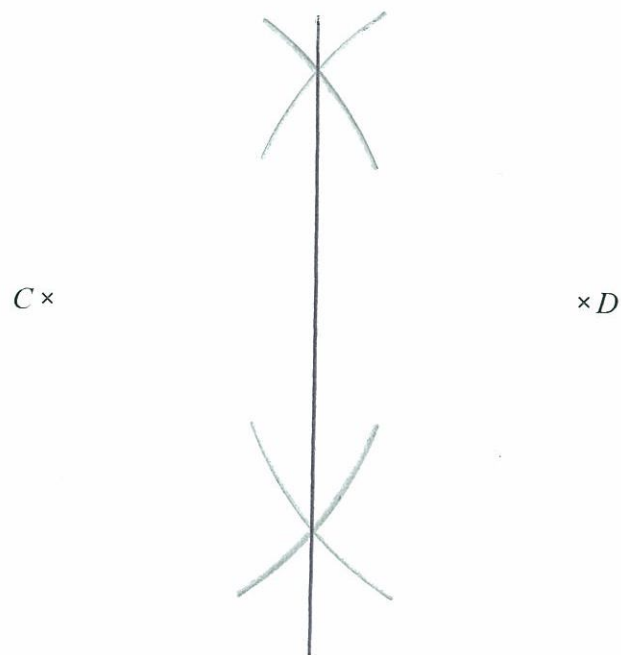
### Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ►

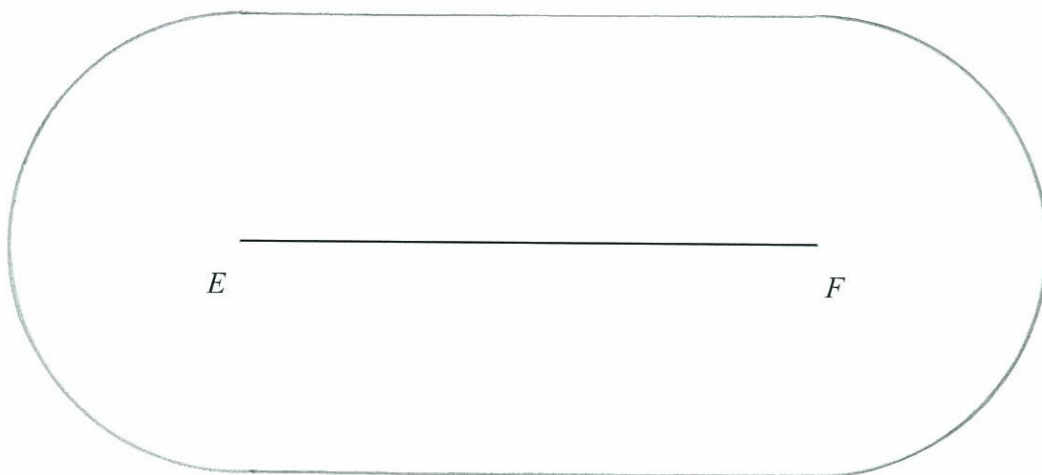


1. (a) Draw the locus of all points which are equidistant from the points  $C$  and  $D$ .



(2)

(b) Draw the locus of all points that are exactly 3 cm from the line  $EF$ .

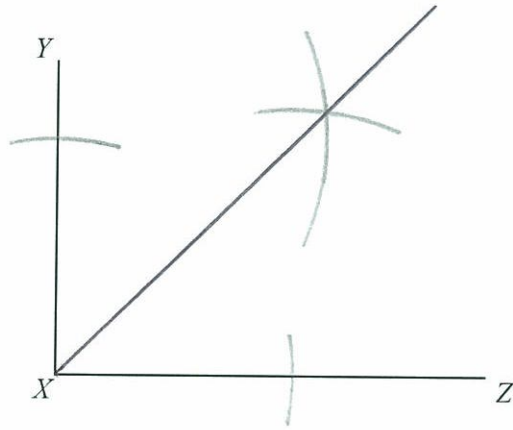


(2)

(Total 4 marks)



2. Draw the locus of all points which are equidistant from the lines  $XY$  and  $XZ$ .



(Total 2 marks)

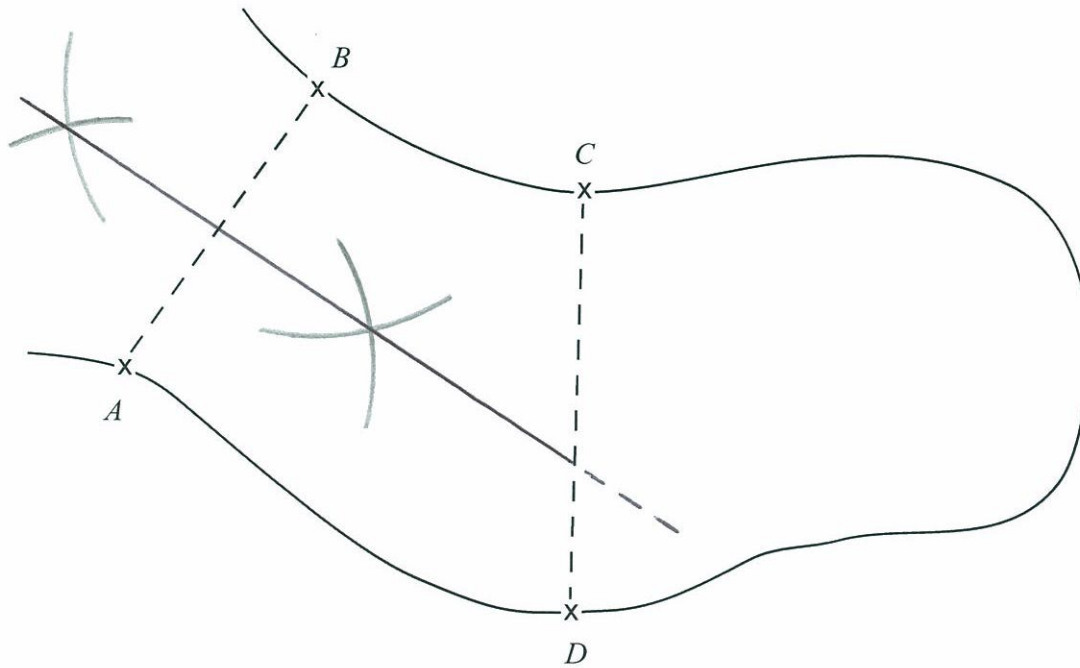


3. The map shows part of a golf course.

A golfer has to hit a ball so that its path between AB and CD is a straight line

and is always the same distance from  $A$  as from  $B$

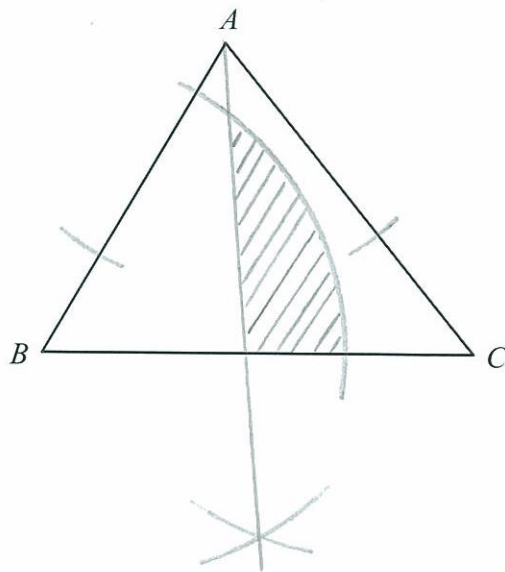
On the map, draw the path the ball should take.



(Total 2 marks)



4.



$ABC$  is a triangle.

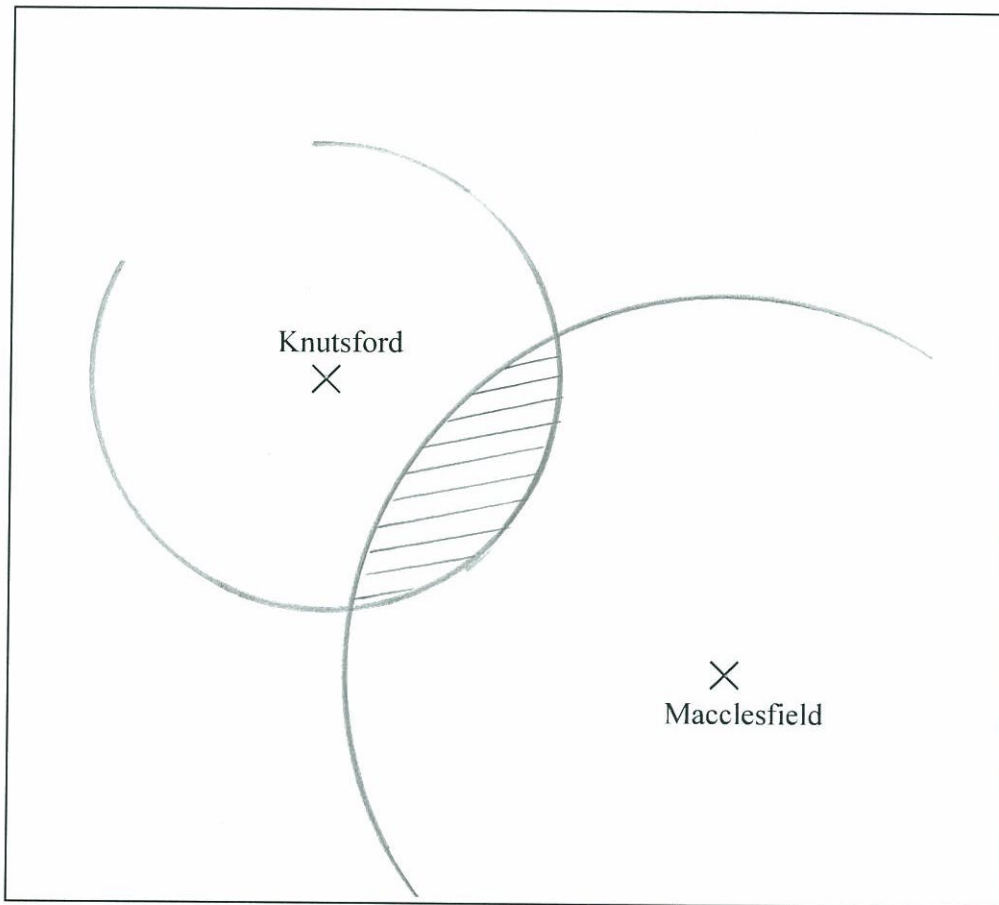
Shade the region inside the triangle which is **both**

**and** less than 4 centimetres from the point  $B$   
and closer to the line  $AC$  than the line  $AB$ .

(Total 4 marks)



5. Here is a map.  
The map shows two towns, Knutsford and Macclesfield.



Scale: 1 cm represents 10 km

A company is going to build a glasshouse.

The glasshouse will be less than 30 km from Knutsford **and** less than 50 km from Macclesfield. Shade the region on the map where the company can build the glasshouse.

(Total for Question 10 is 3 marks)

