

Write your name here

Surname

Other names

**Pearson Edexcel**  
**International**  
**Advanced Level**

Centre Number

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Candidate Number

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# Core Mathematics C12

## Advanced Subsidiary

Tuesday 13 January 2015 – Morning  
**Time: 2 hours 30 minutes**

Paper Reference

**WMA01/01****You must have:**

Mathematical Formulae and Statistical Tables (Blue)

Total Marks

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**Candidates may use any calculator allowed by the regulations of the Joint Council for Qualifications. Calculators must not have the facility for symbolic algebra manipulation, differentiation and integration, or have retrievable mathematical formulae stored in them.**

### Instructions

- Use **black** ink or ball-point pen.
- If pencil is used for diagrams/sketches/graphs it must be dark (HB or B). Coloured pencils and highlighter pens must not be used.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions and ensure that your answers to parts of questions are clearly labelled.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- You should show sufficient working to make your methods clear. Answers without working may not gain full credit.
- When a calculator is used, the answer should be given to an appropriate degree of accuracy.

### Information

- The total mark for this paper is 125.
- The marks for **each** question are shown in brackets – *use this as a guide as to how much time to spend on each question.*

### Advice

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

Turn over ►

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3.

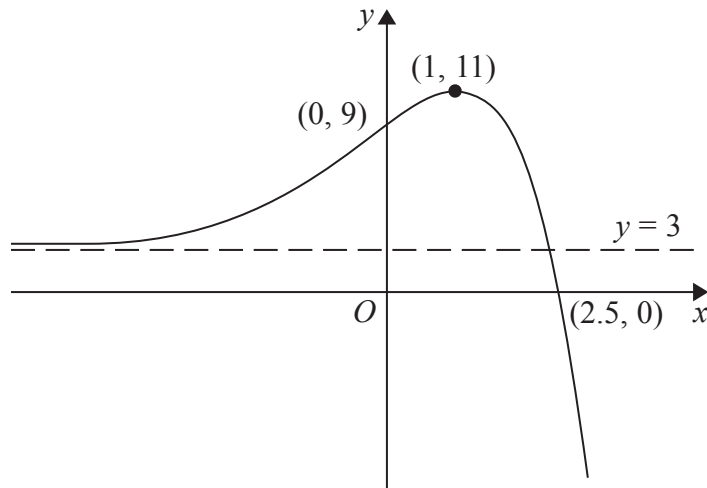


Figure 2

Figure 2 shows a sketch of part of the curve with equation  $y = f(x)$ .  
The curve crosses the coordinate axes at the points  $(2.5, 0)$  and  $(0, 9)$ , has a stationary point at  $(1, 11)$ , and has an asymptote  $y = 3$

On **separate** diagrams, sketch the curve with equation

(a)  $y = 3f(x)$  (3)

(b)  $y = f(-x)$  (3)

On each diagram show clearly the coordinates of the points of intersection of the curve with the two coordinate axes, the coordinates of the stationary point, and the equation of the asymptote.



Leave  
blank

**Question 3 continued**

**Q3**

**(Total 6 marks)**





















































































