

Write your name here

Surname	Other names
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Edexcel Centre Number

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 Candidate Number

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International GCSE

Further Pure Mathematics

Paper 1

Wednesday 22 May 2013 – Afternoon Time: 2 hours	Paper Reference 4PM0/01
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Calculators 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.
- Without sufficient working, correct answers may be awarded no marks.
- Answer the questions in the spaces provided
 – *there may be more space than you need.*

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.*

Advice

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

Turn over ►

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Question 7 continued

A large rectangular area containing 25 horizontal dotted lines for writing the answer to Question 7.

Question 8 continued

A large rectangular area with rounded corners, containing 25 horizontal dotted lines for writing.

9

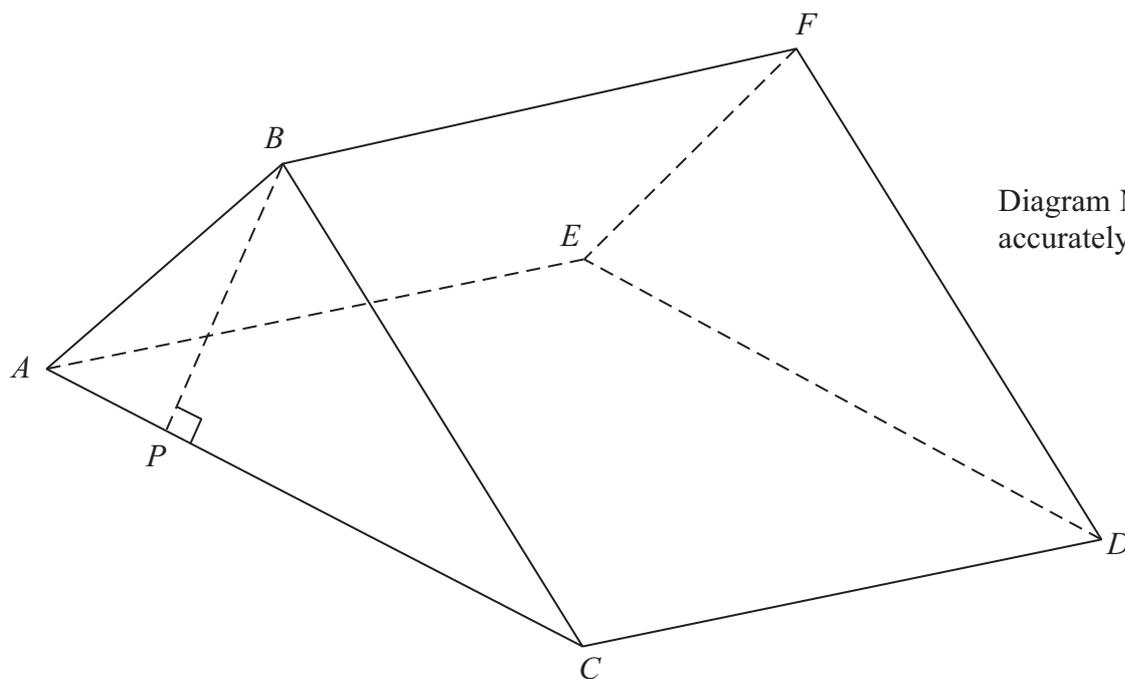


Figure 3

Figure 3 shows a triangular prism $ABCDEF$.

$ACDE$ is a rectangle. In triangle ABC , $AC = 12$ cm, $\angle BAC = 60^\circ$ and $\angle BCA = 30^\circ$

(a) Find the exact length of BC . (3)

The point P lies on the line AC and $\angle BPC = 90^\circ$

(b) Show that $BP = 3\sqrt{3}$ cm. (2)

The angle between the plane AFC and the plane $ACDE$ is 25°

(c) Find, to 3 significant figures, the length of BF . (3)

(d) Find the size of the angle between the line BD and the plane $ACDE$, giving your answer in degrees to 1 decimal place. (4)

(e) Find, to 3 significant figures, the volume of the prism $ABCDEF$. (2)

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Question 9 continued

A series of horizontal dotted lines for writing the answer to Question 9.



Question 11 continued

A large rectangular area containing 25 horizontal dotted lines for writing answers.



