

Write your name here	
Surname	Other names
Edexcel	Centre Number
International GCSE	Candidate Number
Further Pure Mathematics	
Paper 2	
Tuesday 20 June 2017 – Afternoon	Paper Reference
Time: 2 hours	4PM0/02
Calculators may be used.	Total Marks

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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2 Solve the equations

$$y = x^2 - 6x + 5$$

$$y + x = 11$$

(5)

Area with horizontal dotted lines for writing the solution.

(Total for Question 2 is 5 marks)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Question 4 continued

A large rectangular area with horizontal dotted lines for writing.

(Total for Question 4 is 6 marks)



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Question 5 continued

Area for writing answers, consisting of multiple horizontal dotted lines.

(Total for Question 5 is 8 marks)



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Question 6 continued

Area with horizontal dotted lines for writing answers.

(Total for Question 6 is 9 marks)



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Question 7 continued

A large rectangular area with horizontal dotted lines for writing answers.

(Total for Question 7 is 9 marks)



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Question 8 continued

A large rectangular area with horizontal dotted lines for writing.



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Question 8 continued

Area with horizontal dotted lines for writing answers.

(Total for Question 8 is 11 marks)



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Question 9 continued

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



Question 9 continued

Area with horizontal dotted lines for writing answers.

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DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Question 9 continued

Area with horizontal dotted lines for writing answers.

(Total for Question 9 is 15 marks)



10

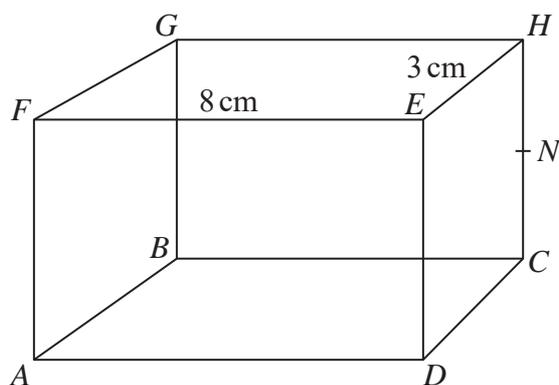


Figure 2

Diagram NOT accurately drawn

Figure 2 shows a solid cuboid $ABCDEFGH$ with $EF = 8\text{ cm}$ and $EH = 3\text{ cm}$.

The angle between the diagonal AH of the cuboid and the plane $ABCD$ is 45° .

The midpoint of CH is N .

Find, in cm to 3 significant figures,

(a) the length of CH , (4)

(b) the length of AH , (3)

(c) the length of FN . (3)

Find, in degrees to 1 decimal place, the size of

(d) the angle between the plane $BCEF$ and the plane $FGHE$, (3)

(e) angle FNG . (3)

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DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Question 10 continued

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

A large rectangular area with horizontal dotted lines for writing.



Question 10 continued

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Area with horizontal dotted lines for writing.

(Total for Question 10 is 16 marks)



Question 11 continued

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

A large rectangular area containing numerous horizontal dotted lines for writing.



