



Oxford Cambridge and RSA

Friday 21 June 2024 – Afternoon

A Level Further Mathematics B (MEI)

Y435/01 Extra Pure

Printed Answer Booklet

Time allowed: 1 hour 15 minutes



You must have:

- Question Paper Y435/01 (inside this document)
- the Formulae Booklet for Further Mathematics B (MEI)
- a scientific or graphical calculator



Please write clearly in black ink. **Do not write in the barcodes.**

Centre number

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Candidate number

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First name(s)

Last name

INSTRUCTIONS

- Use black ink. You can use an HB pencil, but only for graphs and diagrams.
- Write your answer to each question in the space provided in the **Printed Answer Booklet**. If you need extra space use the lined pages at the end of the Printed Answer Booklet. The question numbers must be clearly shown.
- Answer **all** the questions.
- Where appropriate, your answer should be supported with working. Marks might be given for using a correct method, even if your answer is wrong.
- Give your final answers to a degree of accuracy that is appropriate to the context.

INFORMATION

- This document has **12** pages.

ADVICE

- Read each question carefully before you start your answer.

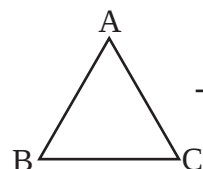
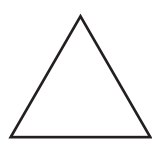
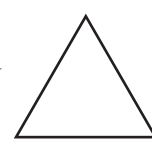
1(a)	
1(b)	
	$a =$
	$b =$
1(c)	

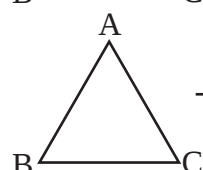
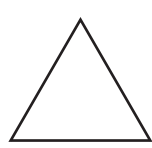
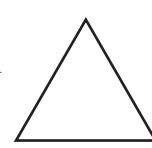
[illegible]

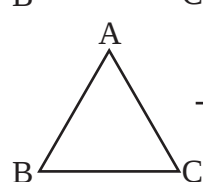
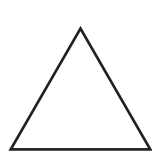
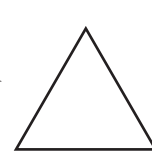
2(a)	
2(b)	

[illegible]

3(a)

 $\rightarrow$  $\rightarrow$  $M_a \circ M_a = \underline{\hspace{2cm}}$

 $\rightarrow$  $\rightarrow$  $M_b \circ M_a = \underline{\hspace{2cm}}$

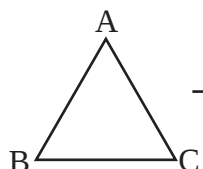
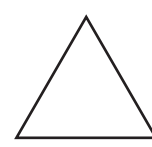
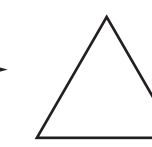
 $\rightarrow$  $\rightarrow$  $R_{120} \circ M_a = \underline{\hspace{2cm}}$

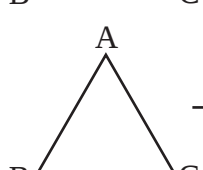
3(b)

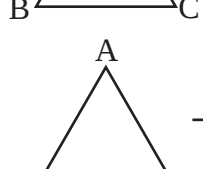
First transformation performed is

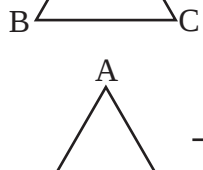
followed by

$\circ$	I	M_a	M_b	M_c	R_{120}	R_{240}
I						
M_a						
M_b						
M_c						
R_{120}						
R_{240}					I	

 $\rightarrow$  $\rightarrow$  $\underline{\hspace{1cm}} \circ \underline{\hspace{1cm}} = \underline{\hspace{2cm}}$

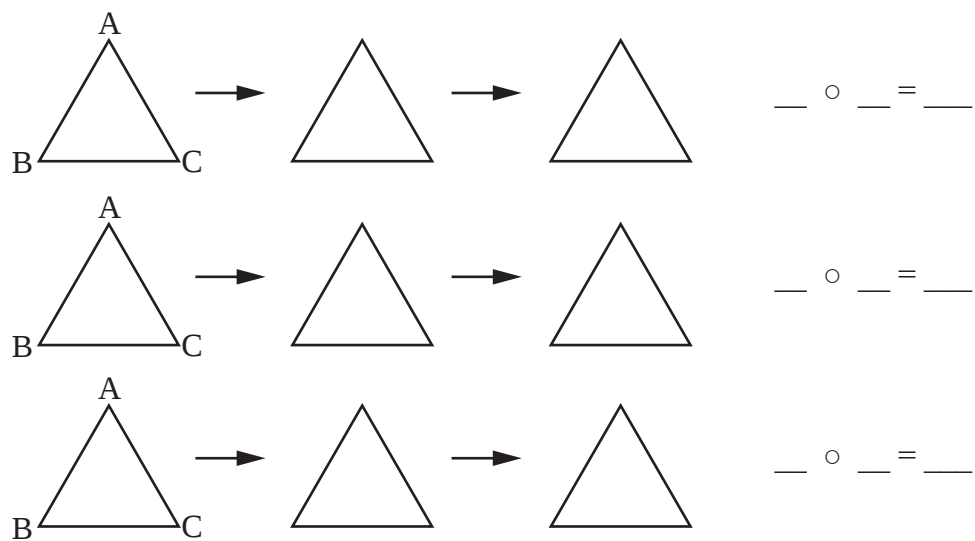
 $\rightarrow$  $\rightarrow$  $\underline{\hspace{1cm}} \circ \underline{\hspace{1cm}} = \underline{\hspace{2cm}}$

 $\rightarrow$  $\rightarrow$  $\underline{\hspace{1cm}} \circ \underline{\hspace{1cm}} = \underline{\hspace{2cm}}$

 $\rightarrow$  $\rightarrow$  $\underline{\hspace{1cm}} \circ \underline{\hspace{1cm}} = \underline{\hspace{2cm}}$

(answer space continued on next page)

3(b) (continued)



If required, further copies may be found at the end of the Printed Answer Booklet.

3(c)

3(d)

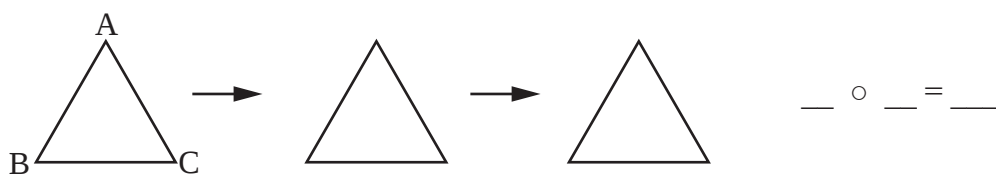
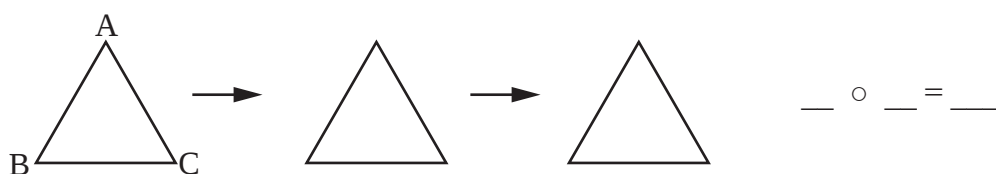
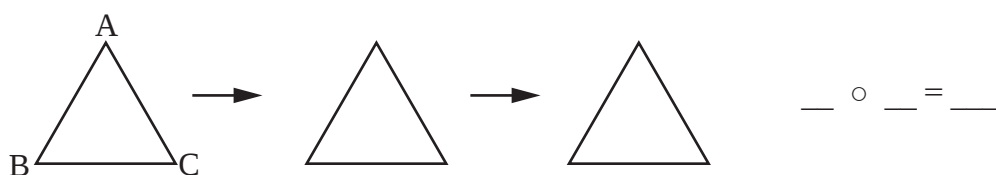
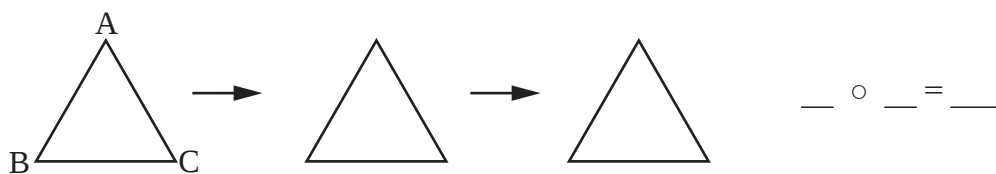
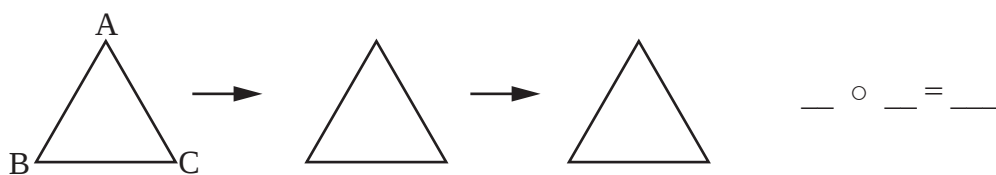
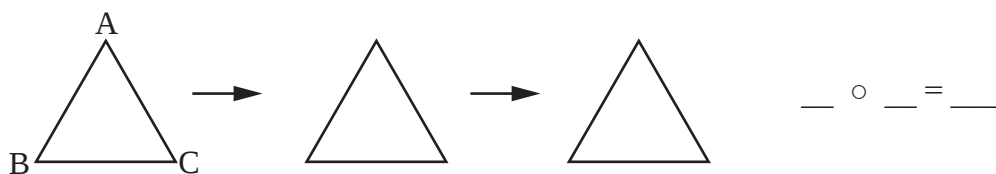
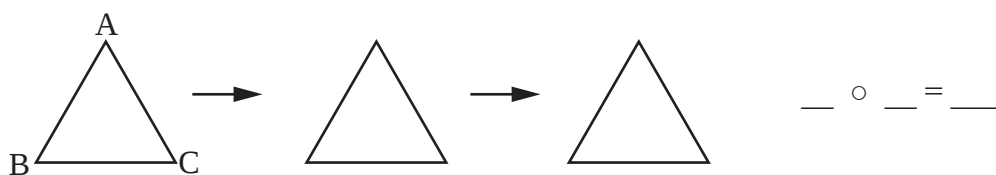
3(e)

4(a)	
4(b)(i)	
4(b)(ii)	

4(c)(i)	
4(c)(ii)	
4(c)(iii)	

5(a)	
5(b)	

Spare diagrams for use with Question 3(a) or 3(b). If any of the diagrams on this page are used, then the question parts they relate to must be clearly stated.



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