



Rewarding Learning

General Certificate of Secondary Education  
2012

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Candidate Number

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## Mathematics

Unit T5 Paper 1  
(Non-calculator)  
Foundation Tier



[GMT51]

\*GMT51\*

MONDAY 11 JUNE 1.30 pm–2.30 pm

### TIME

1 hour.

### INSTRUCTIONS TO CANDIDATES

Write your Centre Number and Candidate Number in the spaces provided at the top of this page.

Write your answers in the spaces provided in the question paper.

Complete in blue or black ink only. **Do not write in pencil or with a gel pen.**

Answer **all thirteen** questions.

Any working should be clearly shown in the spaces provided since marks may be awarded for partially correct solutions.

You **must not** use a calculator for this paper.

### INFORMATION FOR CANDIDATES

The total mark for this paper is 50.

Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question.

Functional Elements will be assessed in this paper.

You should have a ruler, compasses and protractor.

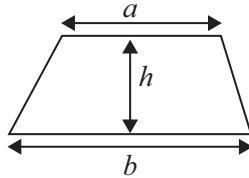
The Formula Sheet is on page 2.

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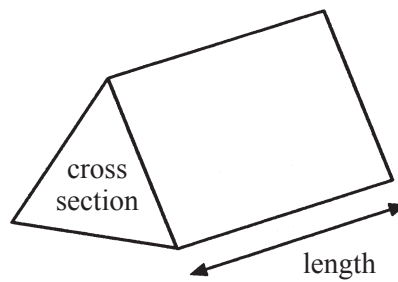


# Formula Sheet

$$\text{Area of trapezium} = \frac{1}{2}(a + b)h$$

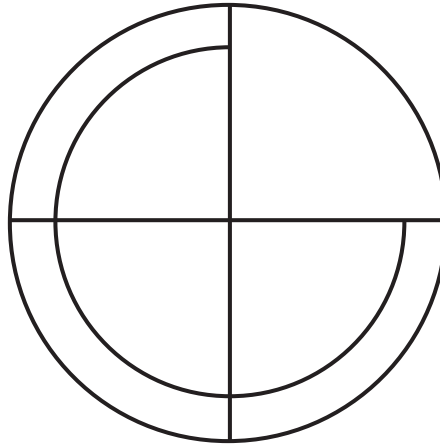
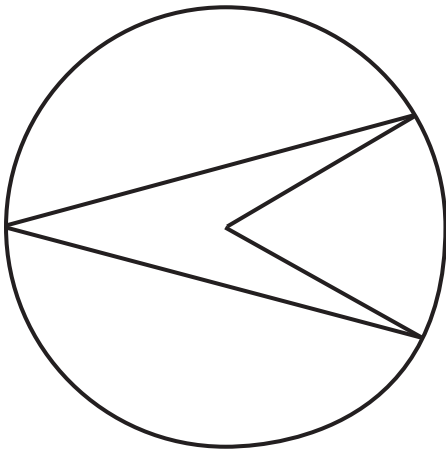


$$\text{Volume of prism} = \text{area of cross section} \times \text{length}$$



Answer **all** questions.

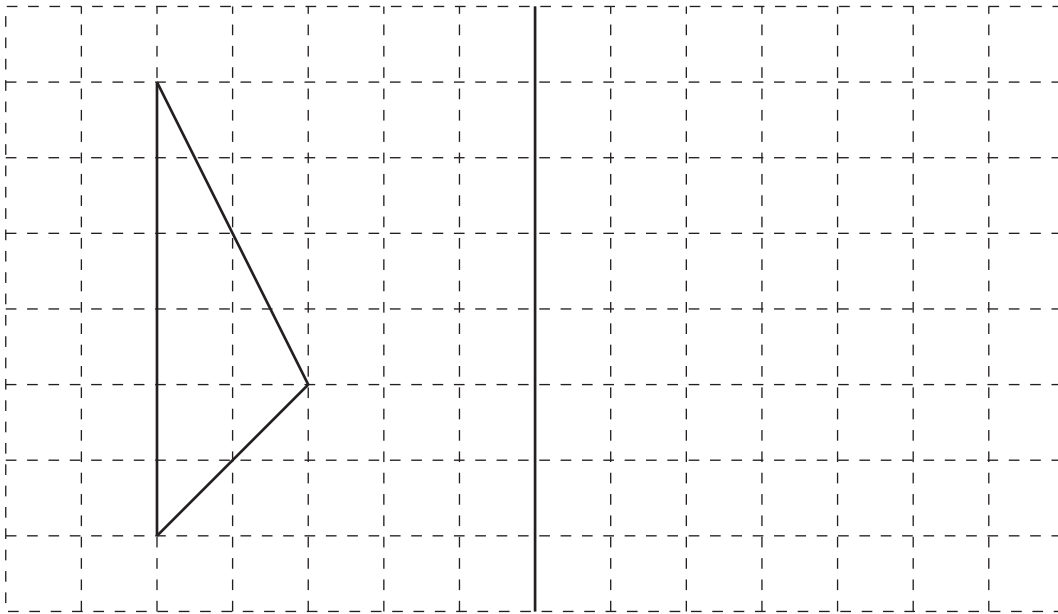
1 (a) Draw a line of symmetry on each shape below.



[2]

(b)

mirror  
line



Draw the reflection of the triangle in the mirror line. \_\_\_\_\_ [2]

Examiner Only

Marks Remark

Total Question 1

[Turn over





3 (a) There were 43 people on a bus.

14 people got off the bus and 11 people got on the bus.

How many people were then on the bus?

Answer \_\_\_\_\_ people [2]

(b) Christine needs 100 tiles for a room.

Tiles are sold in boxes of 8.

Work out the least number of boxes of tiles that Christine needs to buy.

Answer \_\_\_\_\_ boxes [2]

(c) Estimate  $96 + 0.3 + 1.7 + 301.4$

Answer \_\_\_\_\_ [1]

(d) Estimate  $186 \times 4.3$

**Show your working.**

Answer \_\_\_\_\_ [2]

Examiner Only

Marks Remark

Total Question 3

[Turn over



4 From the probabilities listed, choose the most suitable to complete each statement.

**0            0.2            0.5            0.6            0.8            1**

**(a)** My bus is nearly always late.

The probability that my bus is late is \_\_\_\_\_ [1]

**(b)** It is impossible for me to attend the meeting.

The probability that I will attend the meeting is \_\_\_\_\_ [1]

**(c)** I will most likely not attend the concert.

The probability that I will attend the concert is \_\_\_\_\_ [1]

**(d)** I have always been on time for work.

The probability that I was on time for work is \_\_\_\_\_ [1]

Examiner Only	
Marks	Remark
Total Question 4	



5 (a)  $L = 4a + 5b$

Find the value of  $L$  when  $a = 6$  and  $b = 3$

Answer  $L =$  \_\_\_\_\_ [2]

(b)  $W = 5p$

Find the value of  $W$  when  $p = 2.5$

Answer  $W =$  \_\_\_\_\_ [1]

Examiner Only

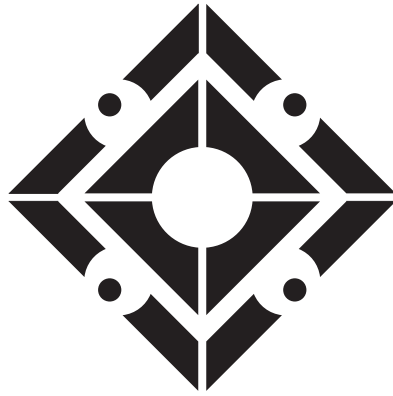
Marks Remark

Total Question 5

[Turn over



6 (a) (i)

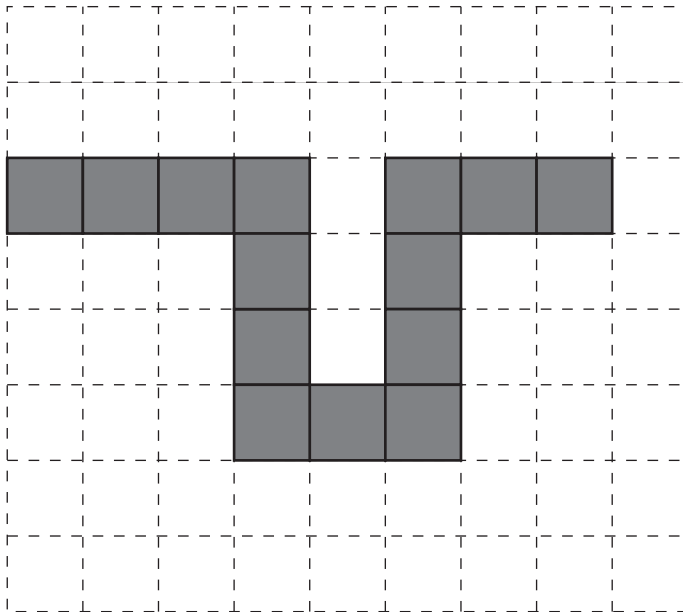


What is the order of rotational symmetry of the shape above?

Answer \_\_\_\_\_ [1]

(ii) Draw **all** the lines of symmetry on the shape above. [2]

(b) (i) Shade one square in the following diagram so that the complete shaded shape has one line of symmetry.



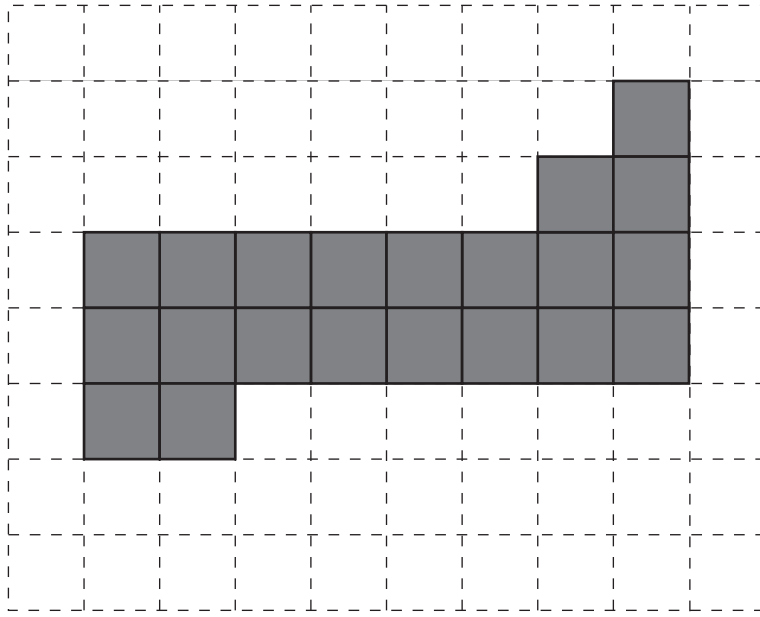
[1]

Examiner Only	
Marks	Remark





- (ii) Shade one square in the following diagram so that the complete shaded shape has rotational symmetry of order 2.



[1]

Examiner Only	
Marks	Remark
Total Question 6	

[Turn over













11 Write down all the values of  $n$ , where  $n$  is an integer, such that  
 $-9 \leq 3n < 3$

Answer \_\_\_\_\_ [2]

Examiner Only

Marks Remark

Total Question 11

[Turn over









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For Examiner's use only	
Question Number	Marks
1	
2	
3	
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5	
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7	
8	
9	
10	
11	
12	
13	
QWC	

<b>Total Marks</b>	
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Examiner Number

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