OCR
RECOGNISING ACHIEVEMENT

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B291A

GENERAL CERTIFICATE OF SECONDARY EDUCATION

MATHEMATICS B (MEI)

Paper 1 Section A (Foundation Tier)

MONDAY 19 MAY 2008

Morning
Time: 45 minutes

Candidates answer on the question paper
Additional materials (enclosed): None

Additional materials (required):
Geometrical instruments
Tracing paper (optional)

CUP/T52214

Candidate Forename		Candidate Surname	
Centre Number		Candidate Number	

INSTRUCTIONS TO CANDIDATES

- Write your name in capital letters, your Centre Number and Candidate Number in the boxes above.
- Use blue or black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure that you know what you have to do before starting your answer.
- Answer **all** the questions.
- Show your working. Marks may be given for a correct method even if the answer is incorrect.
- Do **not** write in the bar codes.
- Write your answer to each question in the space provided.

INFORMATION FOR CANDIDATES

- The number of marks is given in brackets [ ] at the end of each question or part question.
- The total number of marks for this Section is **36**.

WARNING
You are not allowed to use a calculator in Section A of this paper.

FOR EXAMINER'S USE	
SECTION A	
SECTION B	
TOTAL	

This document consists of **10** printed pages and **2** blank pages.

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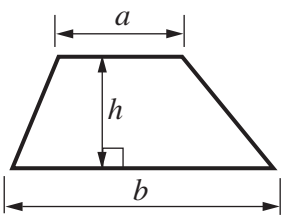
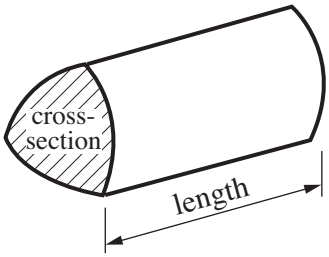
Formulae Sheet: Foundation Tier

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



Volume of prism = (area of cross-section) × length



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1 **(a)** Write in figures the number five thousand seven hundred and four.

(a) ..... [1]

(b) Write 60 243 in words.

.....

..... [1]

(c) Write 5628 to the nearest 10.

(c) ..... [1]

(d) Here is a list of numbers.

5 6 7 8 9 10 11 12

From this list select

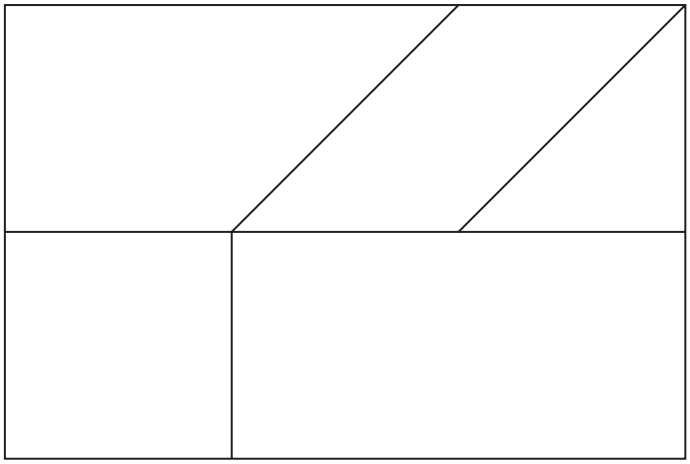
(i) a factor of 14,

(d)(i) ..... [1]

(ii) a multiple of 4.

(ii) ..... [1]

2



The diagram is divided into five shapes.

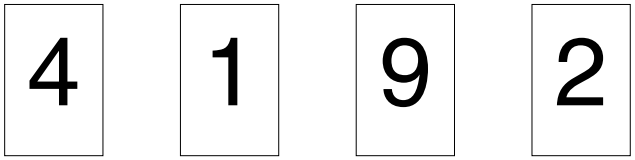
(a) Label the rectangle R. [1]

(b) Label the parallelogram P. [1]

(c) Label the trapezium T. [1]

(d) Mark a right angle on the diagram. [1]

3 **(a)** Here are four number cards.



(i) Write down the largest number that can be made by arranging these four cards.

(a)(i) ..... [1]

(ii) Explain how you obtained your answer to part **(a)(i)**.

.....

..... [1]

(b) **(i)** Write down the whole number nearest to $\sqrt{47}$.

(b)(i) ..... [1]

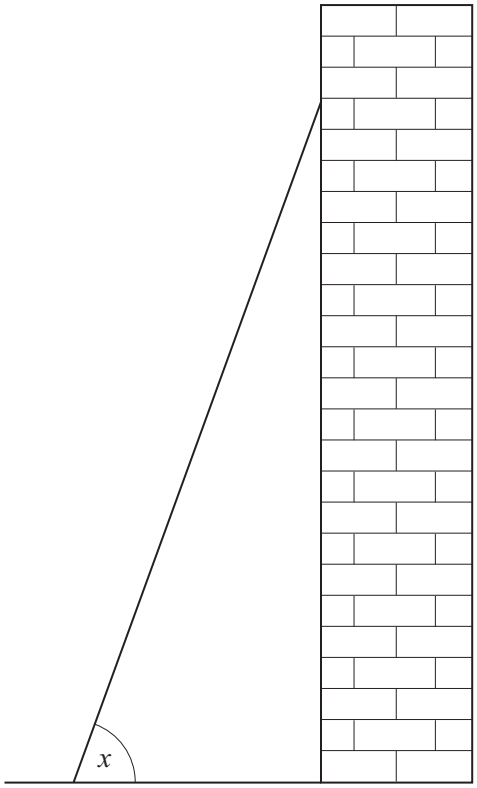
(ii) Explain how you obtained your answer to part **(b)(i)**.

.....

.....

..... [1]

4 The scale drawing represents a ladder leaning against a wall.



(a) The scale is 1 cm to 20 cm.

How high up the wall does the ladder reach?

(a) ..... cm [2]

(b) Measure the angle x.

(b) x = ...° [1]

5 **(a)** Solve this equation.

$2x - 5 = 6$

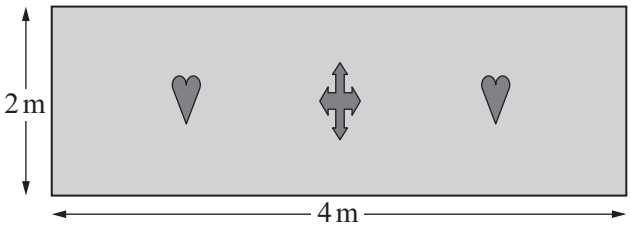
(a) ..... [2]

(b) Simplify this expression.

$2c + 3d + 5c - 4d$

(b) ..... [2]

6 Amy has a rectangular rug measuring 2 metres by 4 metres.



Not to scale

(a) Work out the perimeter of the rug.

(a) ..... m [1]

(b) Work out the area of the rug.
Give the units of your answer.

(b) ..... [3]

7 Simon and Mark played a game.

(a) Here are Simon's scores.

2 7 9 3 4

Work out

(i) the range,

(a)(i) ..... [1]

(ii) the mean.

(ii) ..... [2]

(b) Mark's scores had a range of 3 and a mean of 4.

Make two comparisons between Mark's scores and Simon's scores.

1 .....

2 ..... [2]

8 **(a)** Work out 0.3×0.4.

(a) ..... [1]

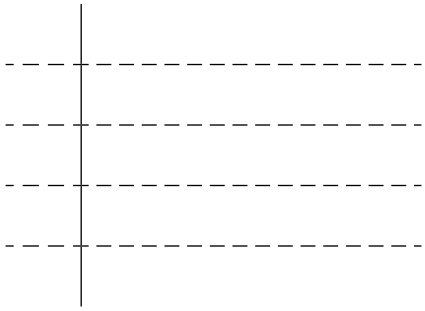
(b) Given that $27.9 \times 316 = 8816.4$ write down the value of 279×3.16.

(b) ..... [1]

9 This list shows the number of minutes taken by each of 11 students to travel to school.

23	42	37	34	28	25
41	28	36	30	43	

Show this information in an ordered stem and leaf diagram.



Key ..... means .....
[3]

10 Rearrange the formula $v = u + 10t$ to make t the subject.

$t =$ ..... [2]

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