F

B261A

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)

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.
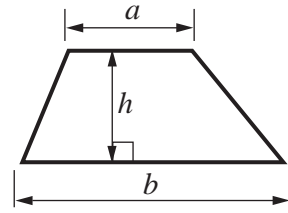- The total number of marks for this Section is **36**.

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

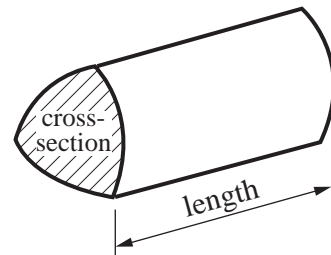| FOR EXAMINER'S USE	
SECTION A	
SECTION B	
TOTAL	

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

Formulae Sheet: Foundation Tier

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

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

PLEASE DO NOT WRITE ON THIS PAGE

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) Work out the following.

(i) $463 + 291$

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

(ii) $539 – 267$

(ii) .... [1]

(e) Here is a list of numbers.

5   6   7   8   9   10   11   12

From this list select

(i) a factor of 14,

(e)(i) .... [1]

(ii) a multiple of 4.

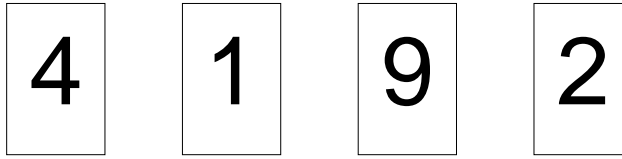**(ii)** .... [1]

[Turn over

2
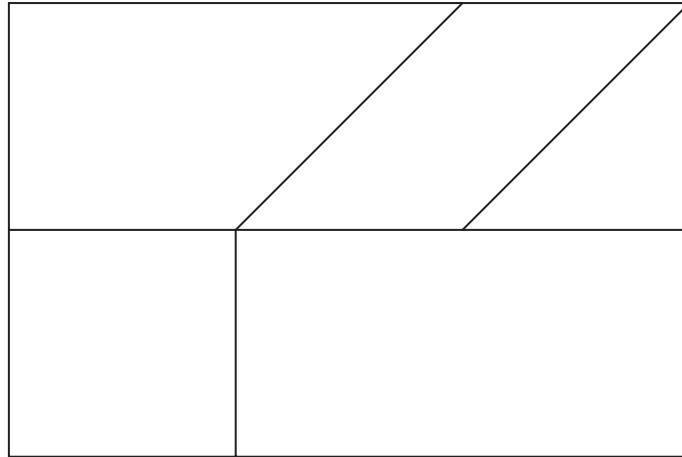
The diagram is divided into five shapes.

(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.

$$\boxed{4} \quad \boxed{1} \quad \boxed{9} \quad \boxed{2}$$

(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]

[Turn over

4 The scale drawing represents a ladder leaning against a wall.
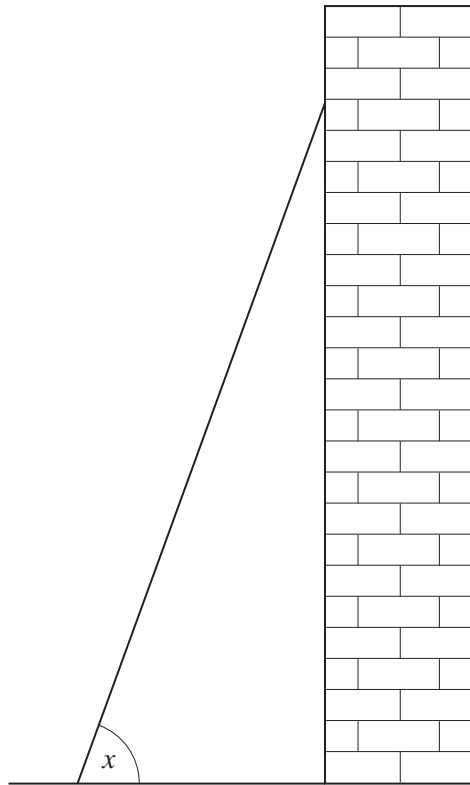
(a) The scale is 1 cm to 20 cm.

How high up the wall does the ladder reach?

(a) .... cm [2]

(b) Measure the angle x.

(b) $x =$ ....° [1]

5 **(a)** Solve these equations.

   (i) $3x = 12$

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

   (ii) $2x - 5 = 6$

   (ii) .... [2]

(b) Simplify this expression.

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

   (b) .... [2]

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

2 m   **Not to scale**

4 m
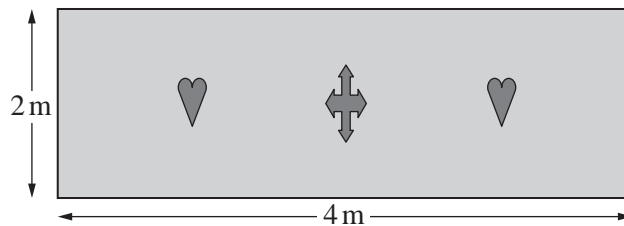
(a) Work out the perimeter of the rug.

   (a) .... m [1]

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

   (b) .... [3]

         [Turn over

7 **(a)** Work out 0.3×0.4.

(a) .... [1]

(b) Work out $3^2 - 2^3$.

(b) .... [2]

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

(c) .... [1]

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

$$23 \qquad 42 \qquad 37 \qquad 34 \qquad 28 \qquad 25$$
$$41 \qquad 28 \qquad 36 \qquad 30 \qquad 43$$

Show this information in an ordered stem and leaf diagram.
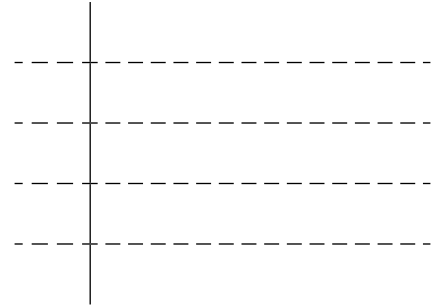
Key .... | .... means ....
[3]

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

$t = $ .... [2]

10

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