

Candidate forename		Candidate surname	
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Centre number						Candidate number				
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**OXFORD CAMBRIDGE AND RSA EXAMINATIONS
GENERAL CERTIFICATE OF SECONDARY EDUCATION**

B275A

**MATHEMATICS C
(GRADUATED ASSESSMENT)**

MODULE M5 (SECTION A)

THURSDAY 20 JANUARY 2011: Morning

DURATION: 30 minutes

SUITABLE FOR VISUALLY IMPAIRED CANDIDATES

Candidates answer on the question paper.

OCR SUPPLIED MATERIALS:

None

OTHER MATERIALS REQUIRED:

Geometrical instruments

Tracing paper (optional)

Pie chart scale (optional)

WARNING

**No calculator can be used for
Section A of this paper.**

READ INSTRUCTIONS OVERLEAF

INSTRUCTIONS TO CANDIDATES

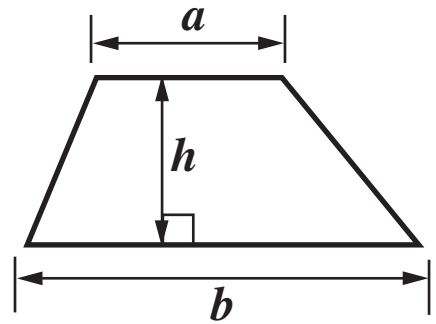
- **Write your name, centre number and candidate number in the boxes on the first page. Please write clearly and in capital letters.**
- **Use black ink. Pencil may be used for graphs and diagrams only.**
- **Read each question carefully. Make sure you know what you have to do before starting your answer.**
- **Show your working. Marks may be given for a correct method even if the answer is incorrect.**
- **Write your answer to each question in the space provided. Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).**
- **Answer ALL the questions.**

INFORMATION FOR CANDIDATES

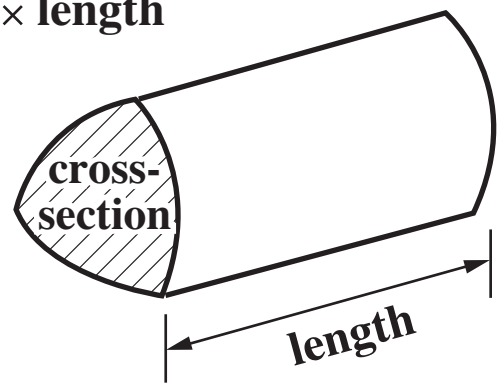
- **The number of marks is given in brackets [] at the end of each question or part question.**
- **The total number of marks for this Section is 25.**

FORMULAE SHEET

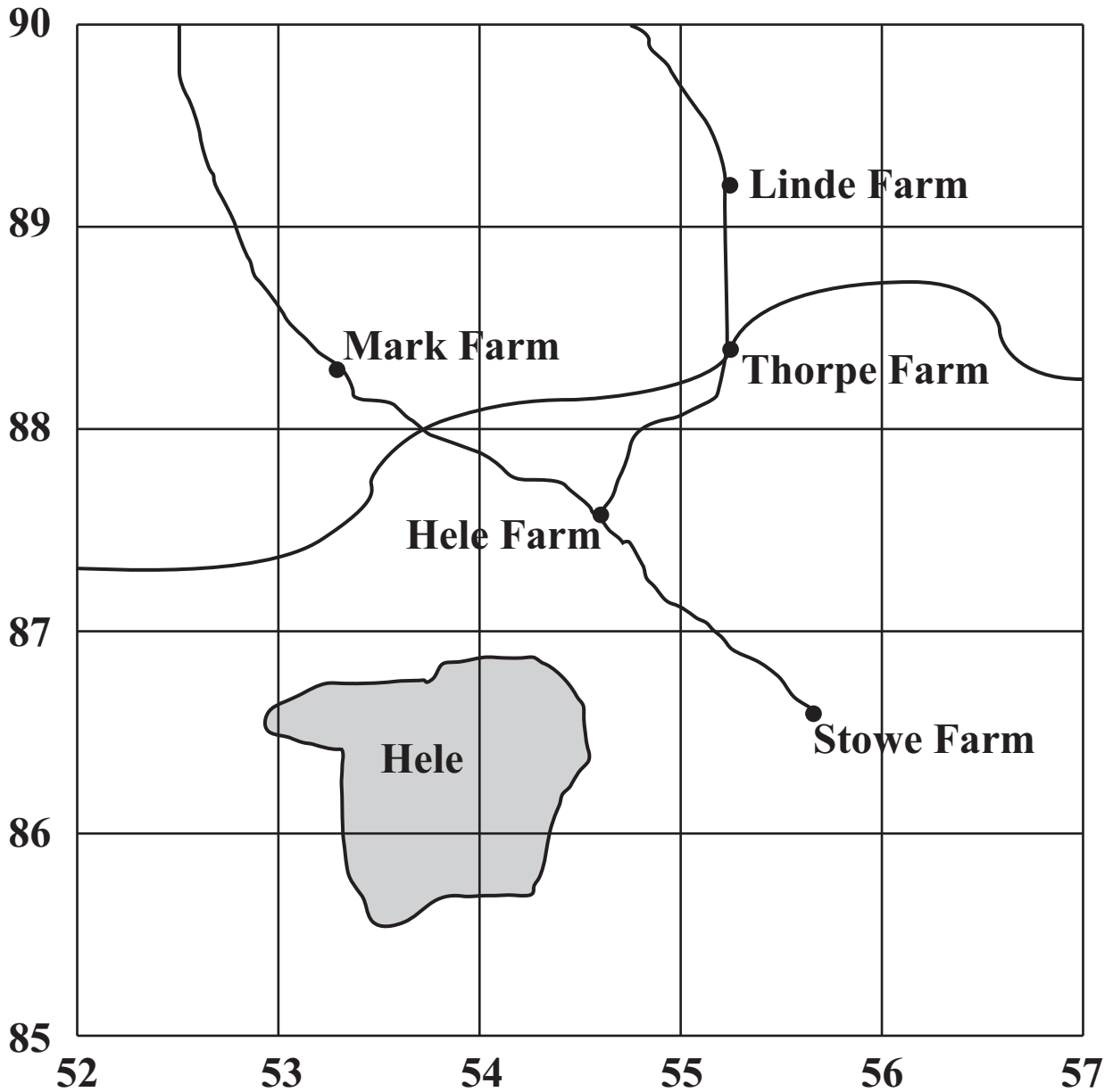
Area of trapezium = $\frac{1}{2} (a + b)h$



Volume of prism = (area of cross-section) \times length



1 Here is a map showing farms near Hele.



(a) Which farm has the four-figure grid reference 5588?

(a) _____ [1]

(b) Give the four-figure grid reference of Hele Farm.

(b) _____ [1]

(c) Thorpe Farm to Linde Farm is 800 m.

Estimate the distance from Stowe Farm to Mark Farm.

(c) _____ m [1]

2 Write 37.19 correct to

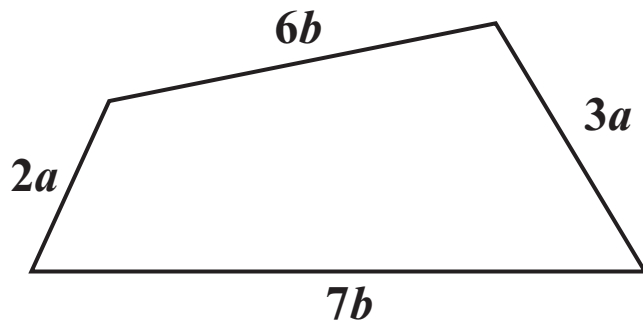
(a) one decimal place,

(a) _____ [1]

(b) one significant figure.

(b) _____ [1]

- 3 (a) Write an expression, in its simplest form, for the perimeter of this quadrilateral.



NOT TO SCALE

(a) _____ [2]

(b) Solve.

(i) $12 = x + 5$

(b)(i) _____ [1]

(ii) $4x + 17 = 5$

(ii) _____ [2]

4 (a) Write this expression as a power of 3.

$$3 \times 3 \times 3 \times 3 \times 3$$

(a) _____ **[1]**

(b) Work out.

$$4^3 + 3^2$$

(b) _____ **[2]**

5 (a) Write this fraction in its simplest form.

$$\frac{24}{40}$$

(a) _____ **[1]**

(b) Work out.

(i) $\frac{3}{5} \times \frac{1}{2}$

(b)(i) _____ [1]

(ii) -3×5

(ii) _____ [1]

**6 Joe is taking his driving test.
The probability that he passes the test is 0.35.**

**What is the probability that Joe fails the test?
Give a reason for your answer.**

_____ because _____
_____ [2]

- 7 The table summarises the marks for a test taken by two classes.

	Mean	Range
11A	53.6	24
11B	45.1	42

- (a) Make two comments comparing the results.

1 _____

2 _____

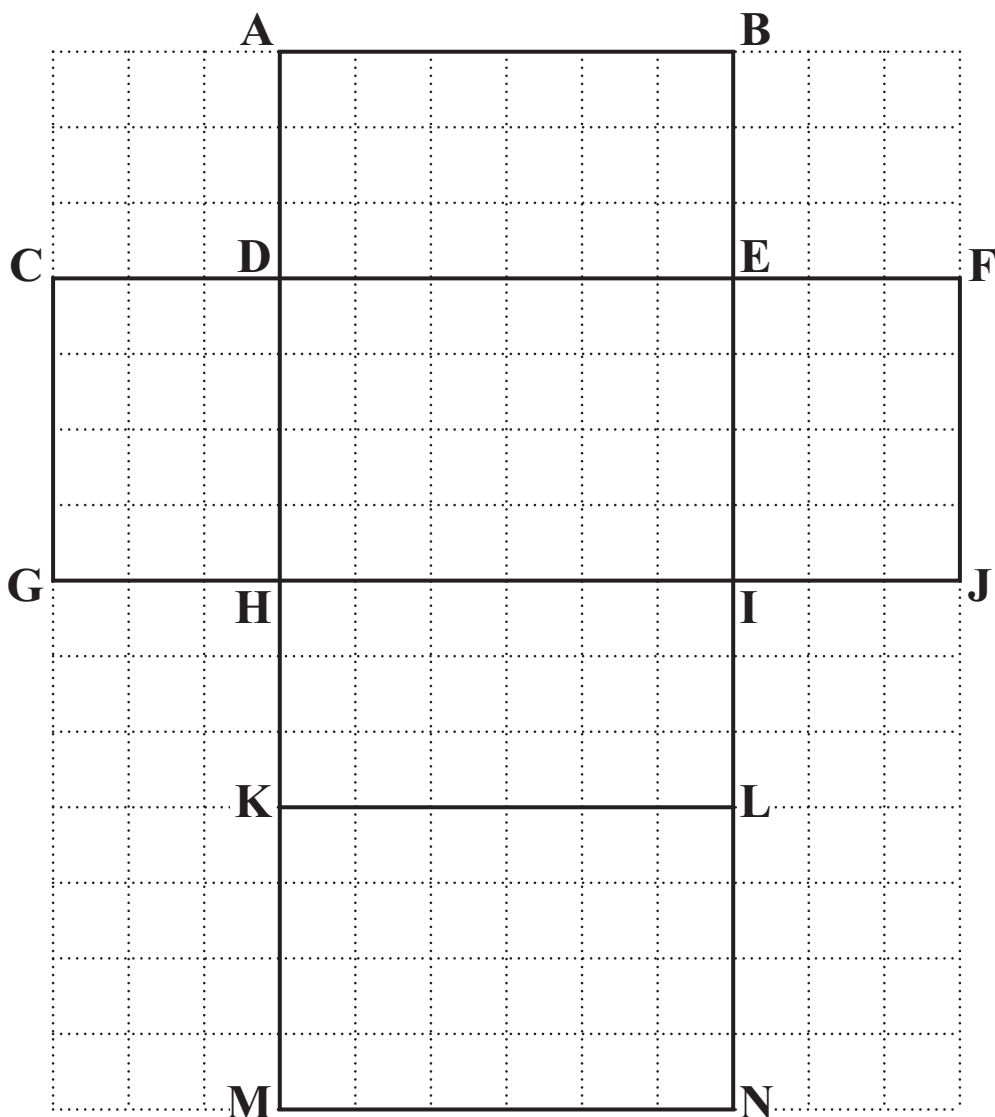
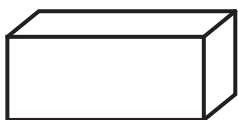
_____ [2]

- (b) In class 11A, Samit scored the lowest mark and Gina scored the highest mark.
Samit scored 39.

What was Gina's mark?

(b) _____ [1]

8 Here is a full-size net of a cuboid.



(a) Which corners join to corner A when the net is folded to make the cuboid?

(a) _____ [1]

**(b) Work out the volume of the cuboid.
Give the units of your answer.**

(b) _____ [3]

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