

**OXFORD CAMBRIDGE AND RSA EXAMINATIONS**  
**General Certificate of Secondary Education**

**MATHEMATICS C**  
**(Graduated Assessment)**



**1966/2336A**

MODULE M6 – SECTION A

Wednesday **29 JUNE 2005** Morning 30 minutes

Candidates answer on the question paper.

Additional materials:

Geometrical instruments

Tracing paper (optional)

Candidate  
Name

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Centre  
Number

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Candidate  
Number

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**TIME** 30 minutes

**INSTRUCTIONS TO CANDIDATES**

- Write your name, Centre number and candidate number in the boxes above.
- Answer **all** the questions.
- Write your answers on the dotted lines unless the question says otherwise.
- Use blue or black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure you know what you have to do before starting your answer.
- There is a space after most questions. Use it to do your working. In many questions marks will be given for a correct method even if the answer is incorrect.
- Do not write in the bar code. Do not write in the grey area between the pages.
- **DO NOT WRITE IN THE AREA OUTSIDE THE BOX BORDERING EACH PAGE. ANY WRITING IN THIS AREA WILL NOT BE MARKED.**

**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.

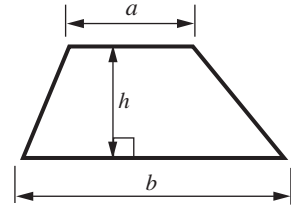
**WARNING**  
 You are not allowed to use a  
 calculator in Section A of this paper.

FOR EXAMINER'S USE	
Section A	
Section B	
<b>TOTAL</b>	

**This question paper consists of 8 printed pages.**

## Formula Sheet

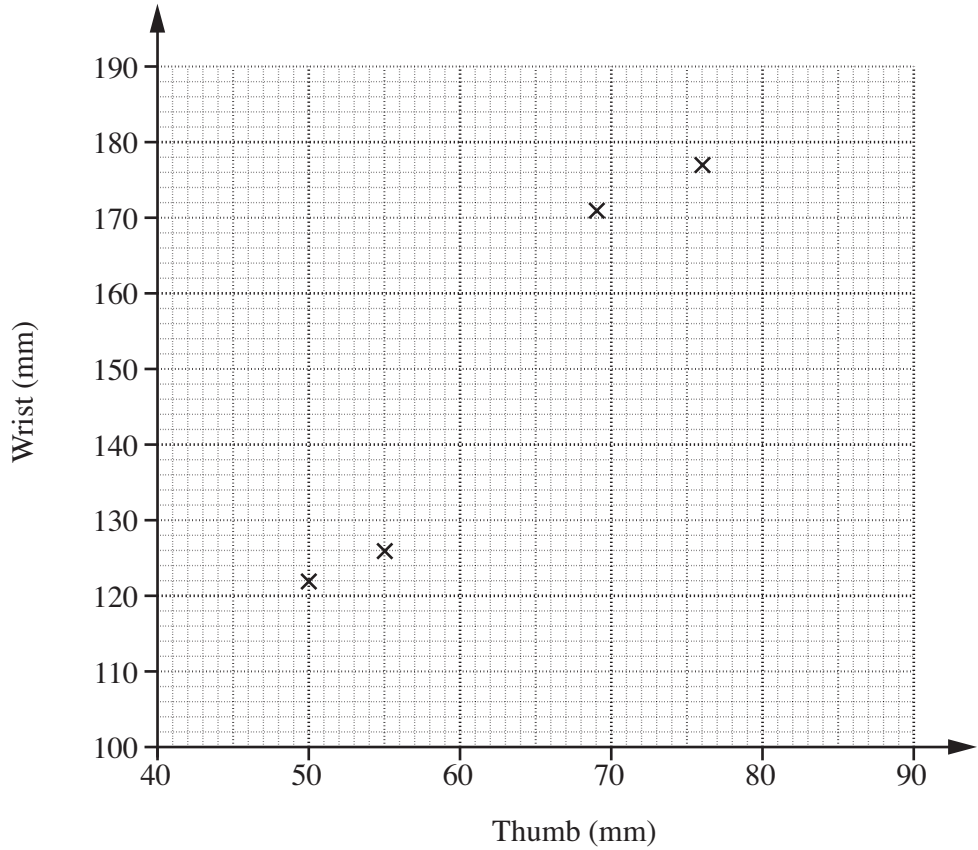
**Area of trapezium** =  $\frac{1}{2} (a + b)h$



1 The table shows the measurements in millimetres around the thumbs and the wrists of 10 people.

Thumb (mm)	69	76	50	55	75	80	66	53	60	62
Wrist (mm)	171	177	122	126	165	168	158	132	135	149

(a) Complete the scatter diagram below.  
The first four points have been plotted for you.



[2]

(b) What does the diagram show about the relationship between the thumb and wrist measurements?

.....

.....

.....[1]

3
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- 2 Jasinder has some pens in his school bag. Some are red, some are black and the rest are blue. He chooses a pen at random from his bag.

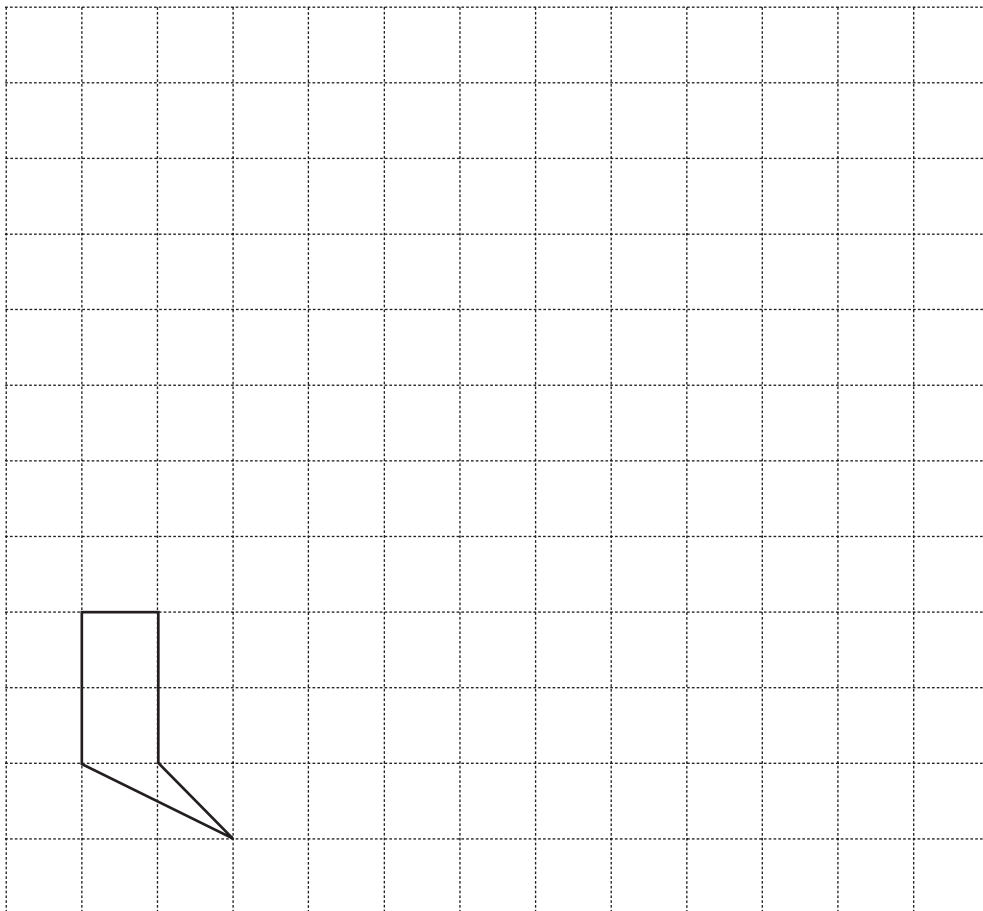
The probability that it is red is 0.2.  
The probability that it is black is 0.5.

What is the probability that it is blue?

.....[2]

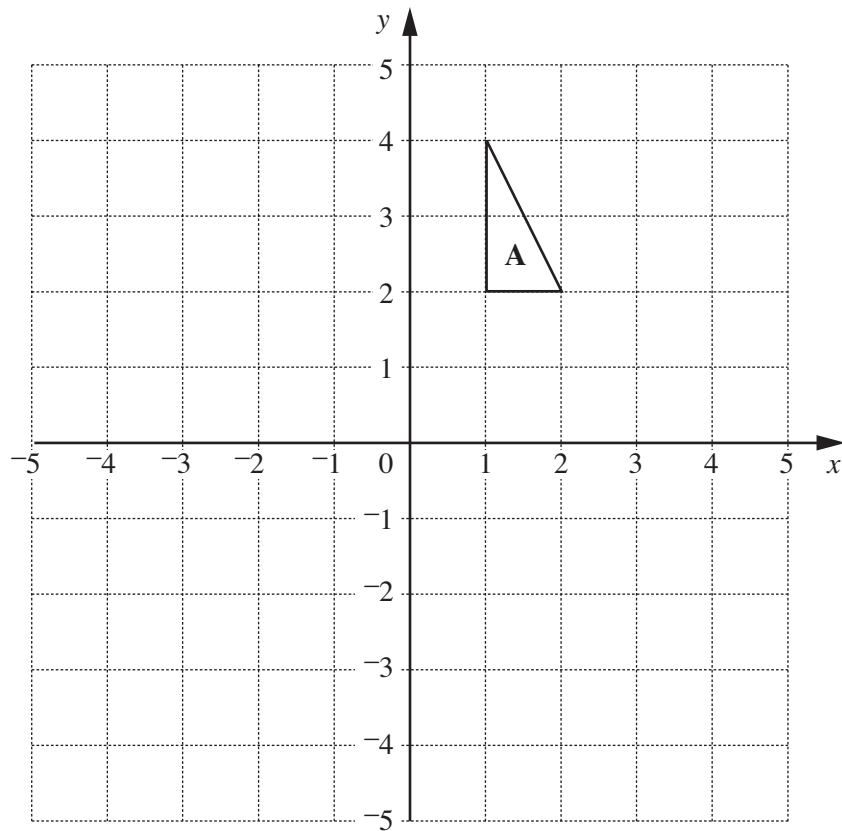
2
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- 3 (a) Draw an enlargement of this shape using a scale factor of 3.



[2]

(b)



- (i) Reflect triangle **A** in the  $y$ -axis.  
Label the image **B**.

[1]

- (ii) Translate triangle **A** 2 units right and 3 units down.  
Label the image **C**.

[1]

4
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4 Work out.

(a) (i)  $0.7 \times 0.4$

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

(ii)  $0.75 \div 2$

(ii) .....[2]

(b)



A recipe for pancakes for 4 people uses  $\frac{2}{3}$  pint of milk.

How much milk is needed to make pancakes for 12 people?

(b) .....pints [3]

6
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5 (a) Factorise.

$$x^2 + 2x$$

(a) .....[1]

(b) Multiply out.

$$4(x - 6)$$

(b) .....[1]

(c) Work out the value of  $x^2 + 3$  when

(i)  $x = 12$ ,

(c)(i) .....[1]

(ii)  $x = -5$ .

(ii) .....[1]

4
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**TURN OVER FOR QUESTION 6**

6 Solve.

(a)  $5x + 2 = 2x + 17$

(a) .....[3]

(b)  $2(x - 3) = 7$

(b) .....[3]

6
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