OCR
RECOGNISING ACHIEVEMENT

OXFORD CAMBRIDGE AND RSA EXAMINATIONS
General Certificate of Secondary Education

MATHEMATICS C
(Graduated Assessment)

1966/2335A

MODULE M5 – SECTION A

Wednesday **29 JUNE 2005** Morning 30 minutes

Candidates answer on the question paper.
Additional materials:
Geometrical instruments
Tracing paper (optional)
Pie chart scale (optional)

Candidate Name

Centre Number

Candidate Number

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.

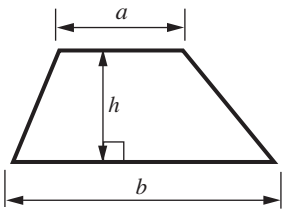
FOR EXAMINER'S USE	
Section A	
Section B	
TOTAL	

This question paper consists of 7 printed pages and 1 blank page.

[Turn over

Formula Sheet

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



1 **(a)** **(i)** Jade buys 41 litres of petrol.
Each litre costs 82·9p.

Write down a calculation she could do in her head to estimate the total cost.

..... = £ .....[2]

(ii) Is your estimate bigger or smaller than the exact cost?
Explain how you decide.

..... because .....

.....[1]

(b) Jade's car is 16 feet long.

About how many metres is this?

(b) .....m [1]

4

2 Work out.

(a) 6^2

(a) .....[1]

(b) $\sqrt{64}$

(b) .....[1]

2

3 **(a)** Write 35% as a decimal.

(a) .....[1]

(b) Write this fraction in its simplest form.

$$\frac{24}{33}$$

(b) .....[1]

(c) Write these fractions in order, starting with the **smallest**.
Show how you decide.

$$\frac{5}{6} \qquad \frac{3}{5} \qquad \frac{17}{30} \qquad \frac{2}{3}$$

....
smallest [3]

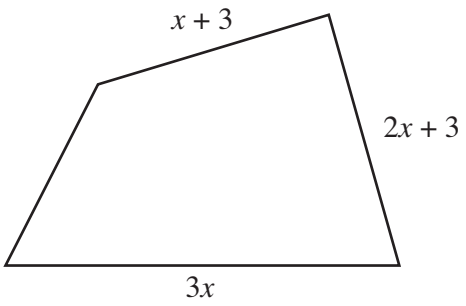
(d) Work out.

$$\frac{11}{12} - \frac{1}{4}$$

(d) .....[2]

7

4 **(a)**



The perimeter of this quadrilateral is $8x + 7$.

Write down, as simply as possible, an expression for the missing length.

(a) .....[2]

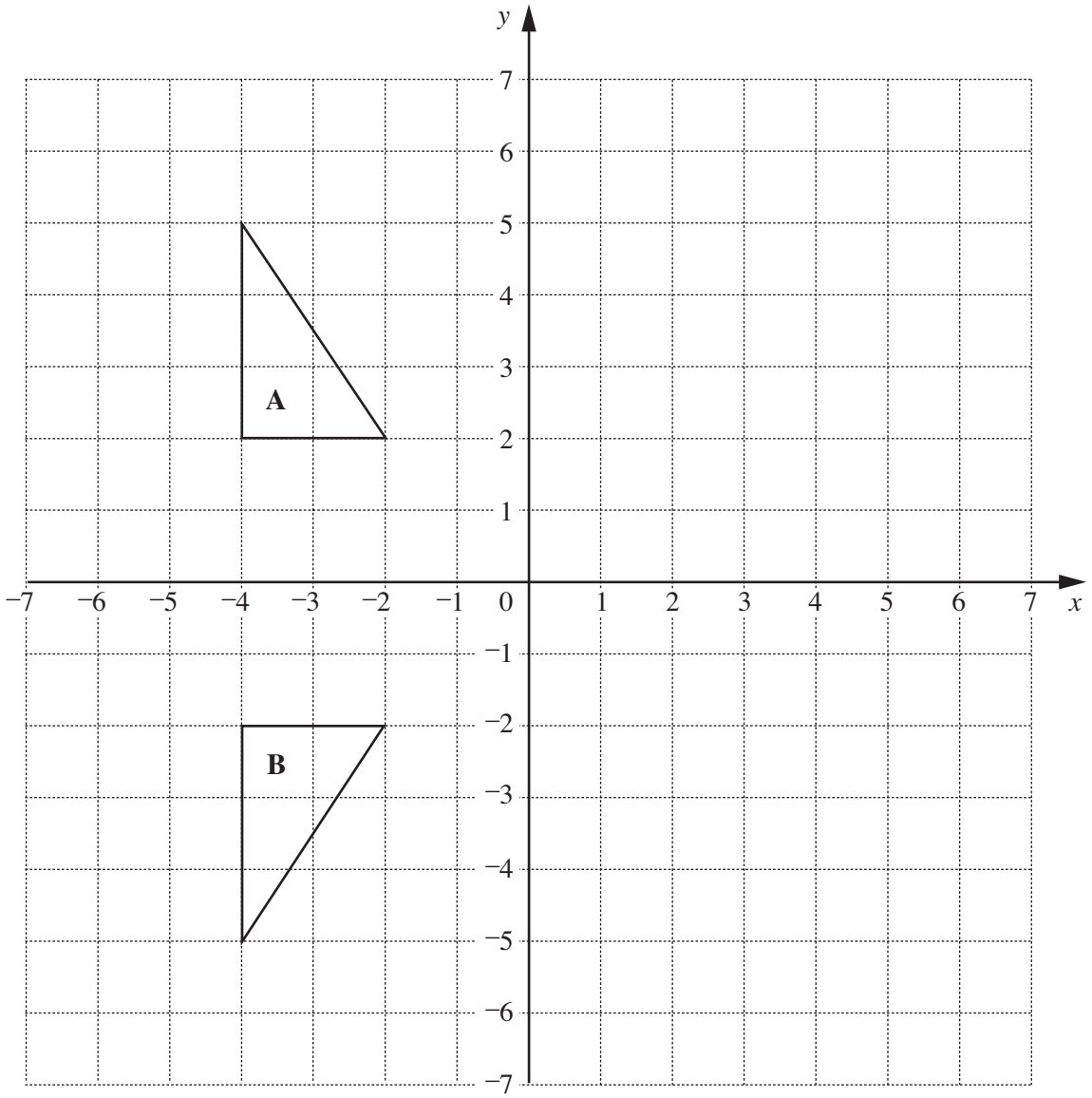
(b) The perimeter of a different shape is $7y + 6$.

Work out $7y + 6$ when $y = 4$.

(b) .....[2]

4

5



(a) Describe the **single** transformation that maps triangle **A** onto triangle **B**.

.....

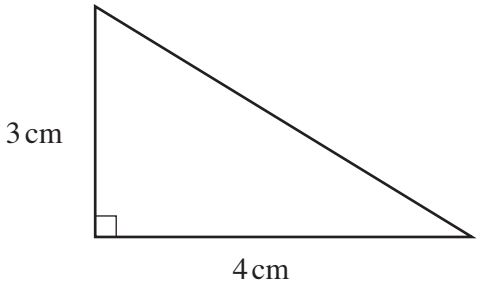
.....[2]

(b) Translate triangle **A** 7 units right and 2 units down.
Label the image **C**. [1]

(c) Rotate triangle **A** 180° about the origin.
Label the image **D**. [2]

5

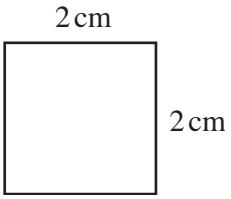
6 **(a)** Work out the area of this triangle.



Not to scale

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

(b)



Bill says the area of this square is 4 cm^2.
Alec says the area of the square is 400 mm^2.
They are both correct.

Complete this sentence.

1 cm^2 = ... mm^2 [1]

3

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