

**GENERAL CERTIFICATE OF SECONDARY EDUCATION
MATHEMATICS C (GRADUATED ASSESSMENT)**

MODULE M6 – SECTION B

MONDAY 22 JANUARY 2007

M6 B246B

Morning

Time: 30 minutes

Candidates answer on the question paper.

Additional materials: Geometrical instruments
Tracing paper (optional)
Scientific or graphical calculator



Candidate
Name

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Centre
Number

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Candidate
Number

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INSTRUCTIONS TO CANDIDATES

- Write your name, Centre Number and Candidate Number in the boxes above.
- Answer **all** the questions.
- 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.
- 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 outside the box bordering each page.
- WRITE YOUR ANSWER TO EACH QUESTION IN THE SPACE PROVIDED. ANSWERS WRITTEN ELSEWHERE WILL NOT BE MARKED.

INFORMATION FOR CANDIDATES

- You are expected to use a calculator in Section B of this paper.
- 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.
- Section B starts with question 7.
- Use the π button on your calculator or take π to be 3.142 unless the question says otherwise.

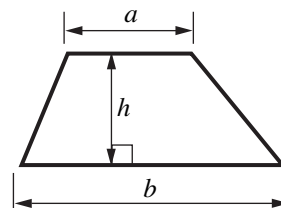
For Examiner's Use

Section B

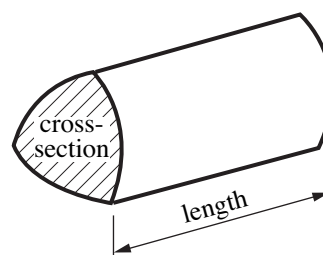
This document consists of **8** printed pages.

Formulae Sheet

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

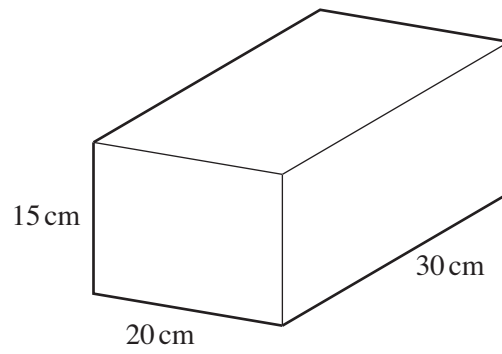


Volume of prism = (area of cross-section) \times length



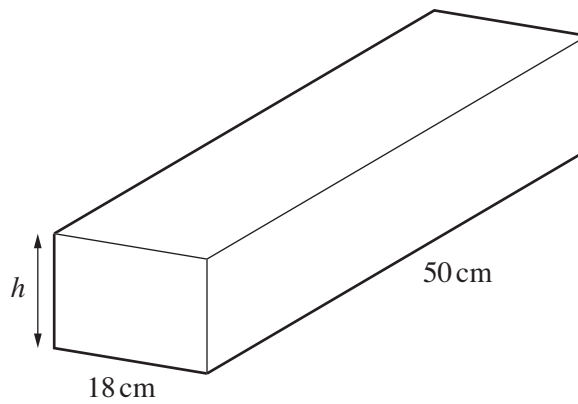
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- 7 (a) Calculate the volume of this cuboid.



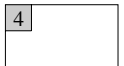
(a).....cm³ [2]

- (b) The cuboid below has the same volume as the cuboid in (a).



Work out the height, h .

(b) cm [2]

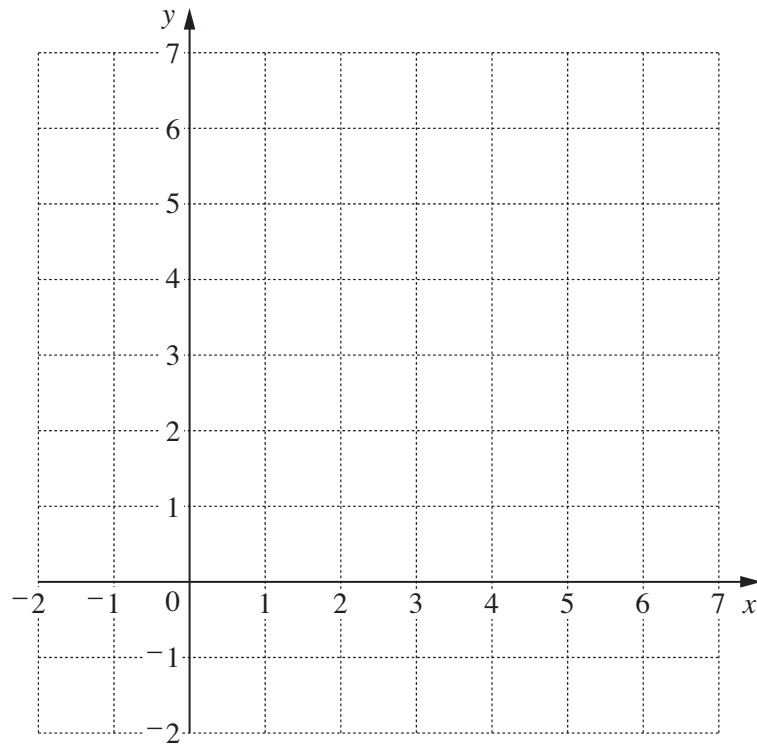


- 8 (a) Complete the table of values for $x + y = 6$.

x	0	2	4	6
y			2	

[1]

- (b) Draw the graph of $x + y = 6$.



[2]

3	

9 Calculate.

(a) $48 \cdot 3 - 6 \cdot 7 \times 4 \cdot 8$

(a)..... [1]

(b) $\frac{7 \cdot 5}{15 - 3 \cdot 4}$

Give your answer correct to 2 decimal places.

(b) [2]

3	

10 Solve.

(a) $8x + 11 = 3x + 21$

(a)..... [3]

(b) $2(2x - 3) = 8$

(b) [3]

6	

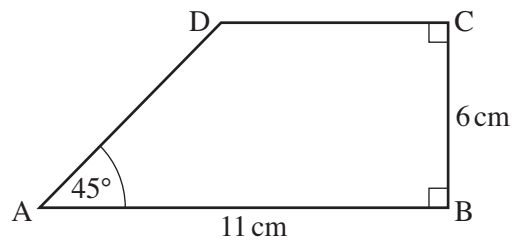
- 11 Dave changed £65 into euros.
He received €91.
At the same time, Graham changed £75 into euros.

How many euros did Graham receive?

€ [3]

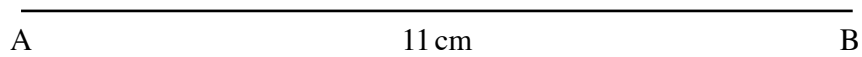
3	
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12 This is a sketch of the trapezium ABCD.



Not to scale

- (a) Draw accurately the trapezium ABCD.
The side AB has been drawn for you.



[3]

- (b) (i) Measure the length DC on your diagram.

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

- (ii) Work out the area of the trapezium ABCD.

(ii)cm² [2]

6	
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