OCR
RECOGNISING ACHIEVEMENT

OXFORD CAMBRIDGE AND RSA EXAMINATIONS
General Certificate of Secondary Education

MATHEMATICS C
(Graduated Assessment)

1966/2336B

MODULE M6 – SECTION B

Wednesday **28 JUNE 2006** Morning 30 minutes

Candidates answer on the question paper.
Additional materials:
Geometrical instruments
Tracing paper (optional)
Scientific or graphical calculator

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.
- 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 8.
- Use the π button on your calculator or take π to be 3·142 unless the question says otherwise.

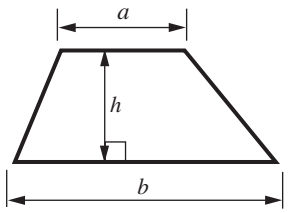
FOR EXAMINER'S USE	
Section B	

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

[Turn over

Formula Sheet

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



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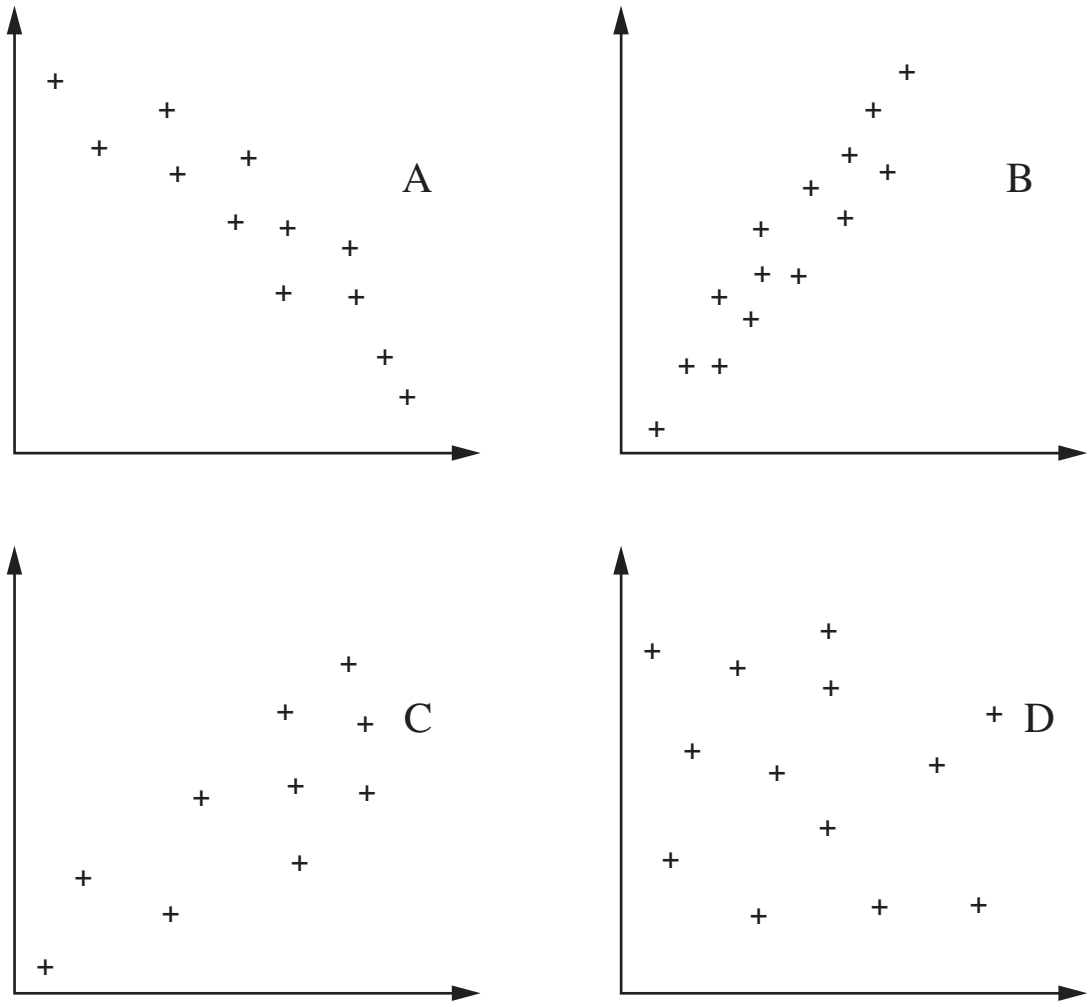
8 Look at these scatter diagrams.



(a) 'The higher the mid-day temperature, the fewer people eat a hot meal.'

Which diagram could represent this?

(a) .....[1]

(b) Which diagram shows no correlation?

(b) .....[1]

2

9 Calculate.

(a) $\sqrt{28 \cdot 75 - 7 \cdot 59}$

(a) .....[1]

(b) $\dfrac{4 \cdot 9^2}{7 \cdot 8 - 5 \cdot 67}$

Give your answer correct to 1 decimal place.

(b) .....[2]

3

10 Solve.

(a) $\dfrac{x}{7} = 5$

(a) .....[1]

(b) $2x - 5 = 6$

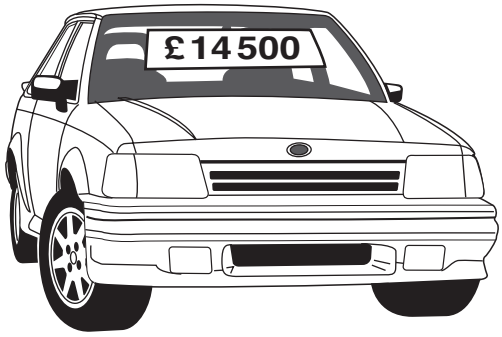
(b) .....[2]

(c) $4(2x + 9) = 20$

(c) .....[3]

6

11 **(a)** Petra bought a new car for £14 500.



At the end of the first year its value had decreased by 28%.

Calculate its value at the end of the first year.

(a) £.....[3]

(b) Paul is making grey paint.

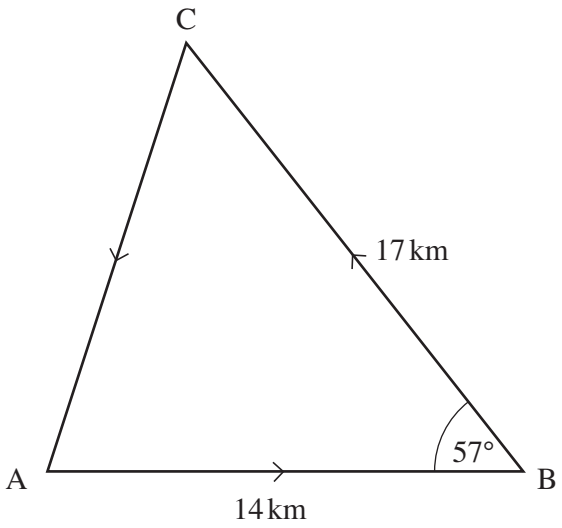
He mixes black and white paint in the ratio 1 : 3.
He makes 35 litres of grey paint.

How much white paint does he use?

(b) .....litres [2]

5

12



Not to scale

The diagram shows the course, ABCA, of a relay race.

(a) (i) Make a scale drawing of the course.
Use a scale of **1 cm to 2 km**.
AB has been drawn for you.

A ——————————————— B

[2]

(ii) Pat ran from C to A.

Use your scale drawing to find how far she ran.

(a)(ii) .....km [2]

(b) Mike ran the 14 km from A to B.
His average speed was 11·2 km/h.

How long did he take?
Give your answer in hours and minutes.

(b) ..... hours .....minutes [3]

7

13 A circular pond has a diameter of 6·5 m.

Calculate the circumference of the pond.

.....m [2]

2

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