Candidate
Name

Centre
Number

Candidate
Number

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.
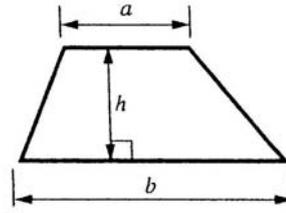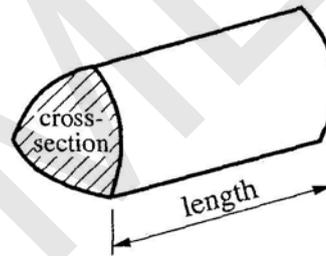- Section B starts with Question 8.

For Examiner's Use

Section B

2

FORMULAE SHEET

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

Volume of prism = (area of cross-section) x length

8 Tom is going by train from London to Preston.

Leave London   8:30   9:30

Leave Crewe   10:05   11:40

Arrive Preston 11:15   12:35

(a) He wants to catch the 9:30 train from London.
He allows 40 minutes to get from home to the station.
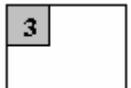
What time does he leave home?

(a) _____ [1]

(b) How long should the 9:30 train take to travel from London to Crewe?
Give your answer in hours and minutes.

(b) _____ hours _____ minutes [1]

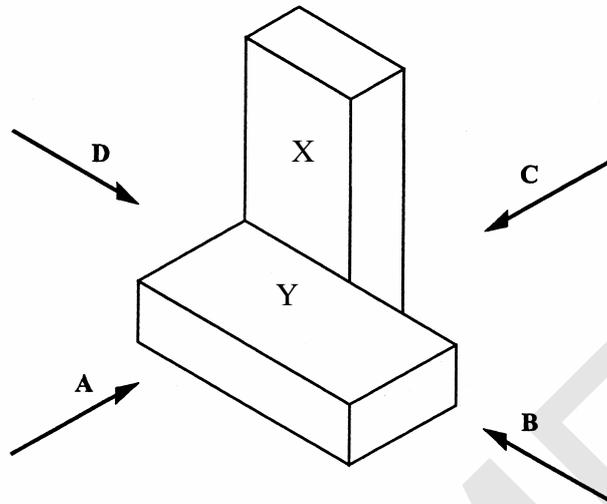**(c)** The 9:30 train from London was 45 minutes late arriving at Preston.

What time did it arrive at Preston?
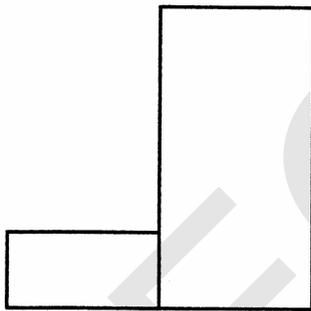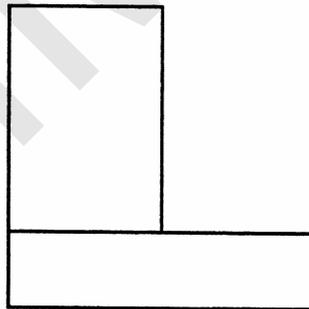
(c) _____ [1]

3

[Turn over

9 Two identical cuboids, X and Y, are placed together on a table.
Each cuboid measures 4 cm by 2 cm by 1 cm.

(a) Here are four views of the cuboids.
Match each view with one of the arrows.

....

....

....

....
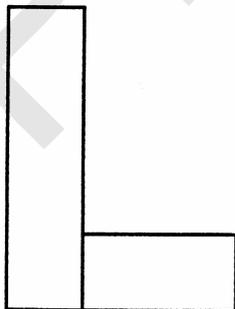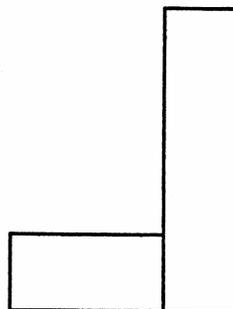
[2]

9 **(b)** On the grid below, draw an accurate diagram of the top of cuboid Y.
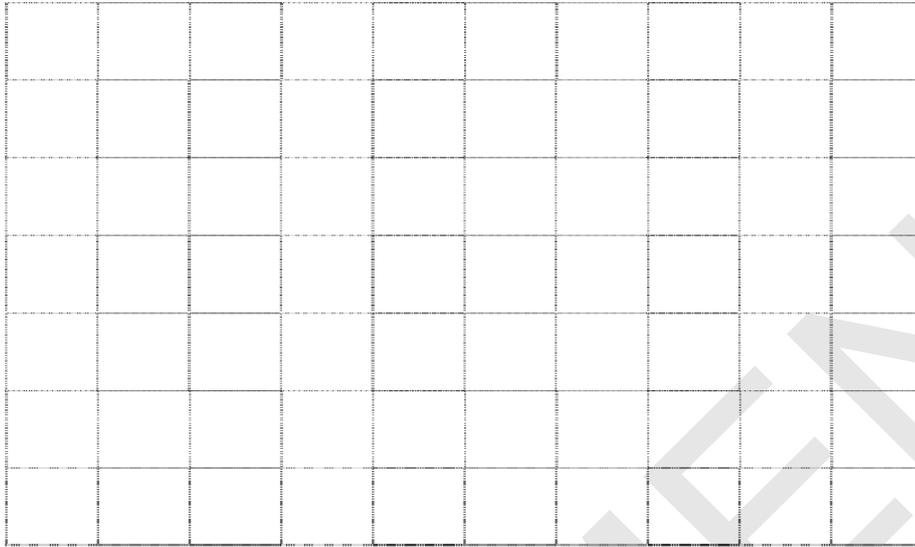
[2]

<div align="right">| 4 | |
|---|---|</div>

10 Pat opens a one litre bottle of orange squash.
Each drink he makes uses 40 millilitres of orange squash.
He makes 20 drinks.

How many millilitres of orange squash are left in the bottle?

.... ml   [3]

<div align="right">| 3 | |
|---|---|</div>

[Turn over

11 (a) Pro-print uses this formula to work out the price, in pounds, of posters.

> **Multiply the number of posters by 3, then add 25**

Work out the price of 15 posters from Pro-print.

(a) £ _____ [2]

(b) Fasta-print uses this formula to work out the price, in pounds, of posters.

> $P = 5n$

P is the price in pounds
n is the number of posters

Work out the price of 12 posters from Fasta-print.

(b) £ _____ [1]

3

12 This diagram shows a sketch of a garden.

17 m

12 m

18 m

x
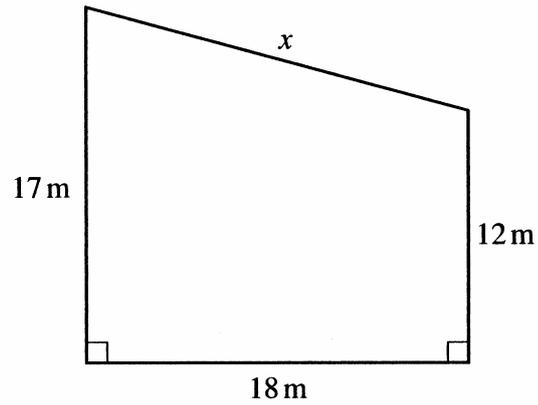
Not to scale

(a) Make an accurate scale drawing of the garden.
Use a scale of **1 cm to 2 m**.
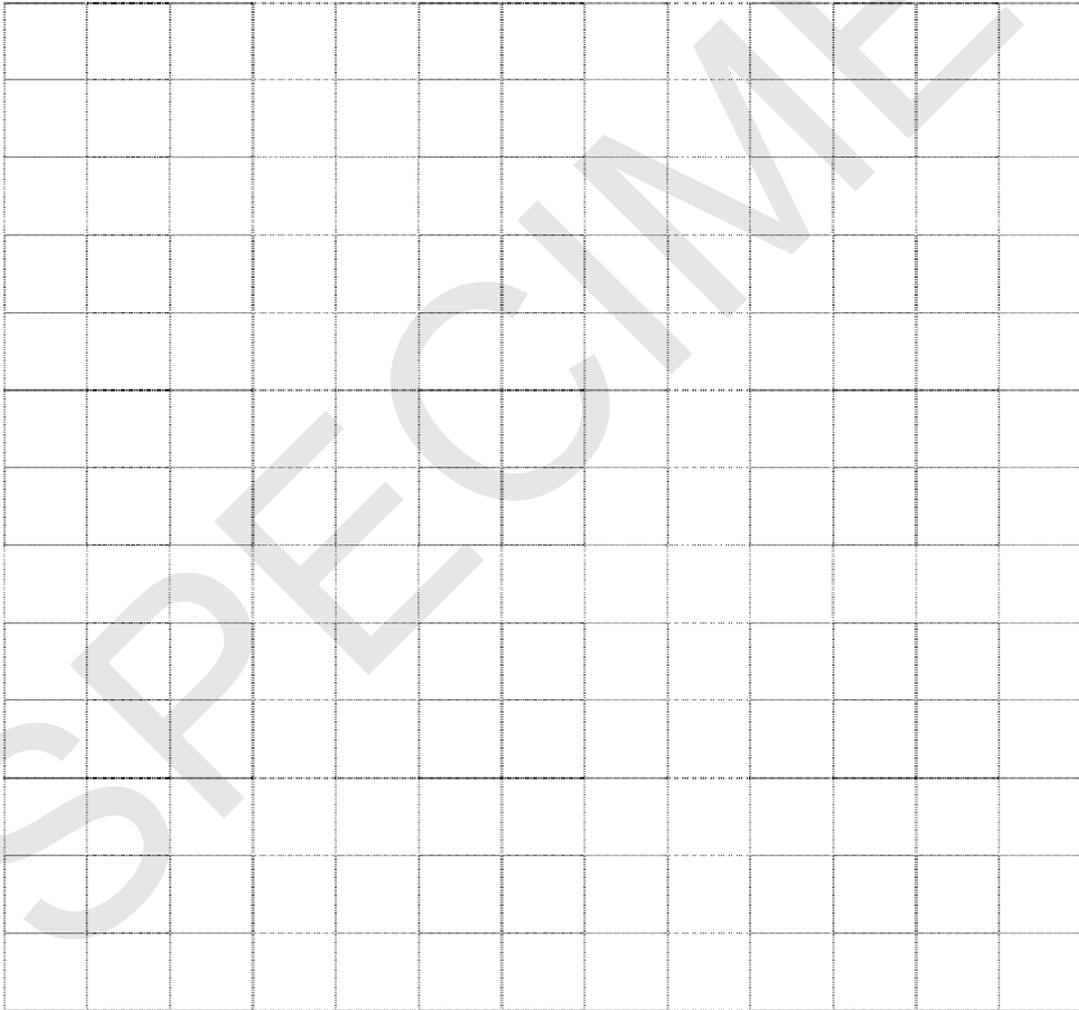
[3]

(b) What is the real length, in metres, of the side *x*?

(b) _____ m [2]

5

[Turn over

13 Eileen and Bill went on a walking holiday in France.

(a) This graph can be used to convert between pounds (£) and euros (€).

(i) Eileen changed £30 into euros.

How many euros did she receive?

(a)(i) € _____ [1]

13   **(ii)**   They spent €35 in a restaurant.

           Use the graph to convert €35 into pounds.

                                                      (ii)   £ _____   [1]

        (iii)   When they returned from France they had €200 left.

            How much is this in pounds?
            You must show all your working.

                                                      (iii)   £ _____   [2]
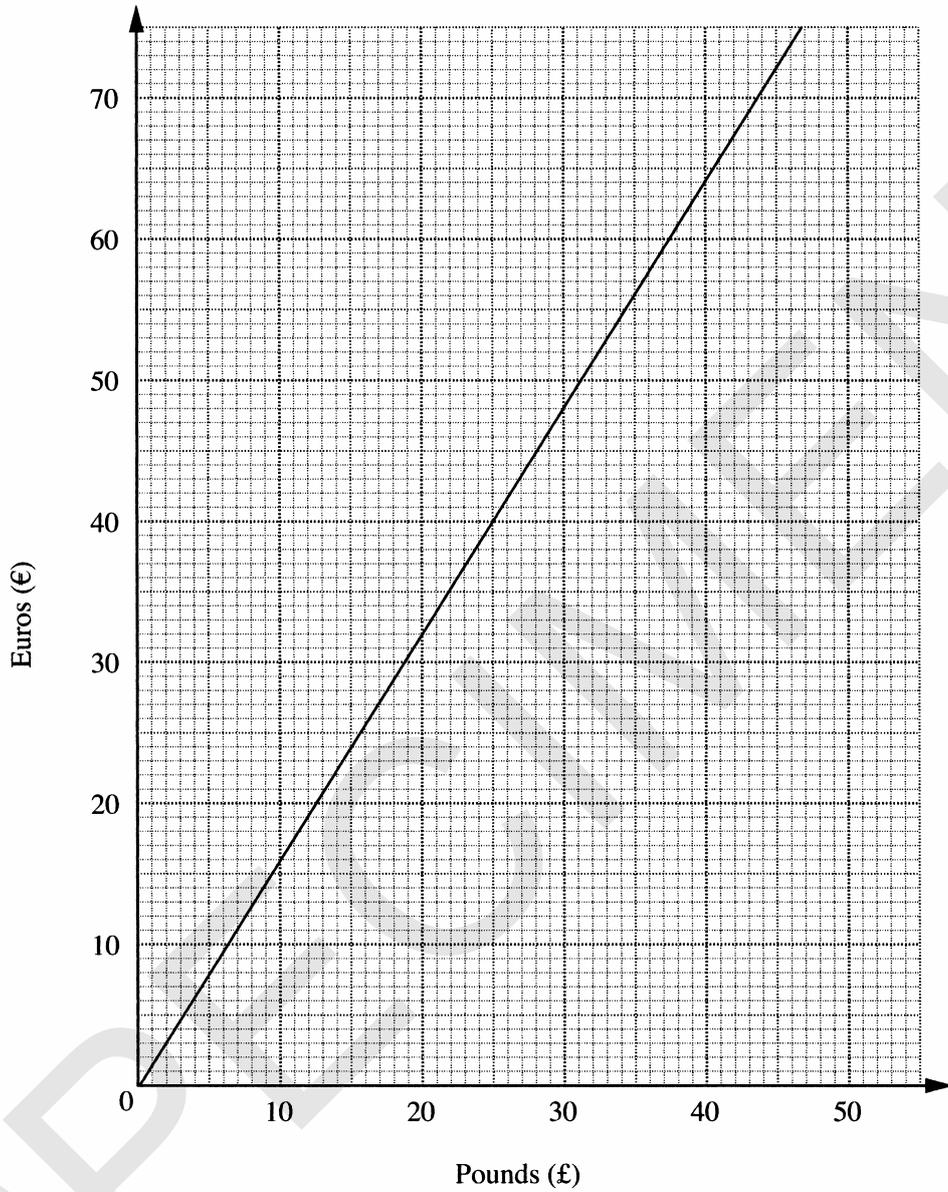
     (b)   These are the distances, in kilometres, they walked each day.

        15   **18**   **17**   **25**   **19**   **15**   **24**

        Work out the mean distance.

                                                      (b)   _____ km   [3]

Section B Total [25]

                                                           | 7 |

10
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11
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12
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OXFORD CAMBRIDGE AND RSA EXAMINATIONS

General Certificate of Secondary Education

MATHEMATICS C   **B273/B**

MODULE M3 – SECTION B

Specimen Mark Scheme

The maximum mark for this paper is 25.

This document consists of **3** printed pages and **1** blank page.

8	**(a)**	8:50 or equivalent	**1**			
	(b)	2 (hours) 10 (minutes)	**1**			
	(c)	13:20	**1**			Or equivalent
			3			
9	**(a)**	C A				**W1** for two correct
		D B	**2**			
	(b)	rectangle 4cm by 2cm	**2**			Accept any orientation
						W1 for rectangle with one pair of sides correct
			4			
10		200	**3**			**W2** for 800 seen *or*
						M1 for use of 1000 **and**
						M1 for 40 x 20
			3			
11	**(a)**	70	**2**			**W1** for 45 seen *or* or figs 7 (0)
	(b)	60	**1**			
			3			
12	**(a)**	correct scale drawing	**3**			**W1** for each of the 3 given sides correct
						Allow ± 0·2cm
	(b)	18·1 to 19	**2**			**W1** for 9 to 9·5 seen
						Allow ± 0·1cm
						f.t. from *their* drawing
			5			
13	**(a)(i)**	47 to 49	**1**			
	(ii)	21 to 23	**1**			
	(iii)	120 to 130	**2**			**M1** for any correct method e.g.
						€40 = £25
	(b)	19	**3**			**M1** for $\sum x (= 133)$ and
						M1 for *their* 133 ÷ 7
			7			

Section B Total 25

Assessment Objectives Grid

Question	AO2	AO3	AO4	Total
8	3			**3**
9			4	**4**
10			3	**3**
11	3			**3**
12		5		**5**
13	4		3	**7**
Totals	**10**	**5**	**10**	**25**

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