RECOGNISING ACHIEVEMENT

## GENERAL CERTIFICATE OF SECONDARY EDUCATION

## SPECIMEN

## MATHEMATICS C

B271/A

## MODULE M1 - SECTION A

## SPECIMEN

Candidates answer on the question paper.
Additional Materials:
Geometrical instruments
Tracing paper (optional)

Time: 30 minutes


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

- 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 this paper.

For Examiner's Use
Section A

This document consists of 8 printed pages.

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


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


1 Find the missing numbers.
(a) $36-?=20$
(a)
(b) $24 \div ?=4$
(b)
(c) $?+18=26$
(c)
(d) $8 \times ?=40$
(d)

## 4

2 (a) A pencil is 68 mm long.

How many centimetres is 68 mm ?
(a)
(b) A lorry is 9.3 metres long.

How many centimetres is 9.3 metres?

(b)


3 Complete each sentence using two different numbers from the list.
You can use a number in more than one answer.

|  | 50 | 52 | 54 | 56 | 58 | 60 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 49 | 51 | 53 | 55 | 57 | 59 | 61 |

(a) $\qquad$ and are odd numbers.
(b) $\qquad$ and are divisible by 5 .
(c) $\qquad$ and are divisible by 10 .

4 What number does each arrow point to?
(a)

(a)
(b)

(b)

5 Name the parts the arrows point to on the circle below.
Choose from this list.


6 Charles is going to Stratford on the Shakespeare Express steam train.

| Snow Hill | 1035 |
| :--- | :--- |
| Tyseley | 1050 |
| Stratford | 1135 |


(a) Charles gets the 1050 train from Tyseley.

He gets to Stratford at 1135 .

How long does his journey take?
(a) minutes
(b) His train back leaves Stratford at 1805.

The journey from Stratford takes 40 minutes.

At what time does he get back to Tyseley?
(b)
[1]
(c) Charles buys two adult tickets for $£ 15$ each and four child tickets for $£ 5$ each.

How much do the tickets cost altogether?
(c) $£$
[3]
(d) The train leaves Snow Hill at 1035 and gets to Stratford at 1135.

Coming back, the train leaves Stratford at 1805 and gets to Snow Hill at 1855.

Which journey takes less time, and by how many minutes?

The train journey that leaves $\qquad$ is shorter by $\qquad$ minutes.


Sara's CD player holds 10 CDs.
She loads these CDs: 5 rock CDs
2 dance CDs
3 rap CDs
The player selects the CDs at random.
(a)
likely certain evens unlikely ${ }^{\text {cimpossible }}$

Choose the best word to complete each of these sentences.

It is $\qquad$ that the first $C D$ will be rock.

It is $\qquad$ that the first CD will be rap.
(b) Complete this sentence.

The first CD is more likely to be rap than

8


Use these cards to complete the following.

Each card may be used in more than one answer.
(a)

$=70$
(b)


## Section A Total [25]

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (OCR) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

OCR is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.

OXFORD CAMBRIDGE AND RSA EXAMINATIONS
General Certificate of Secondary Education
MATHEMATICS C
MODULE M1 - SECTION A
Specimen Mark Scheme
The maximum mark for this paper is 25 .

| 1 | a) <br> b) <br> c) <br> d) | $\begin{array}{\|l} \hline 16 \\ 6 \\ 8 \\ 5 \end{array}$ | $\begin{gathered} \text { W1 } \\ \text { W1 } \\ \text { W1 } \\ \text { W1 } \\ 4 \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | b) <br> c) | $\begin{aligned} & 6.8 \\ & 730 \end{aligned}$ | $\begin{gathered} \text { W1 } \\ \text { W1 } \\ 2 \end{gathered}$ |  | accept 7 m 30 cm soi |
| 3 | a) <br> b) <br> c) | Any 2 of the odd numbers $\begin{aligned} & 50,55,60 \\ & 50,60 \end{aligned}$ | w1 <br> W1 <br> W1 <br> 3 |  | both <br> any two of the three <br> both - if total 0 scored, SC2 for only 1 given in each |
| 4 | a) <br> b) | $\begin{aligned} & 160 \\ & 39 \end{aligned}$ | w1 <br> W1 <br> 2 |  |  |
| 5 |  | correctly indicated circumference and centre | $\begin{aligned} & 1 \\ & 1 \\ & 2 \end{aligned}$ |  |  |
| 6 | a) <br> b) <br> c) <br> d) | 45 <br> 1845 <br> 50 <br> Stratford (accept 1805); 10 | W1 <br> W1 <br> W3 <br> W2 7 | M1 M1 or W1 | accept equivalent times throughout $\begin{aligned} & 2 \times 15(=30) \text { oe } \\ & 4 \times 5(=20) \text { oe } \end{aligned}$ <br> correct addition of their 30, their 20 <br> 60 or 50 seen |


| $\mathbf{7}$ | a) | evens <br> impossible <br> Dance | W1 |
| :--- | :--- | :--- | :---: | :--- | :--- | :--- |
| ( |  |  |  |

Assessment Objectives Grid

| Question | AO2 | AO3 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | 4 |  |  | 4 |
| 2 |  | 2 |  | 2 |
| 3 | 3 |  |  | 3 |
| 4 |  | 2 |  | 2 |
| 5 |  | 2 |  | 2 |
| 6 | 7 |  |  | 7 |
| 7 |  |  | 3 | 3 |
| 8 | 2 |  |  | 2 |
| Totals | 16 | 6 | 3 | 25 |

