

Candidate forename		Candidate surname	
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Centre number						Candidate number				
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**OXFORD CAMBRIDGE AND RSA EXAMINATIONS  
GENERAL CERTIFICATE OF SECONDARY EDUCATION**

**B271A**

**MATHEMATICS C  
(GRADUATED ASSESSMENT)**

**MODULE M1 (SECTION A)**

**THURSDAY 20 JANUARY 2011: Morning**

**DURATION: 30 minutes**

**SUITABLE FOR VISUALLY IMPAIRED CANDIDATES**

**Candidates answer on the question paper.**

**OCR SUPPLIED MATERIALS:**

**None**

**OTHER MATERIALS REQUIRED:**

**Geometrical instruments**

**Tracing paper (optional)**

**WARNING**

**No calculator can be used for  
Section A of this paper.**

**READ INSTRUCTIONS OVERLEAF**

## **INSTRUCTIONS TO CANDIDATES**

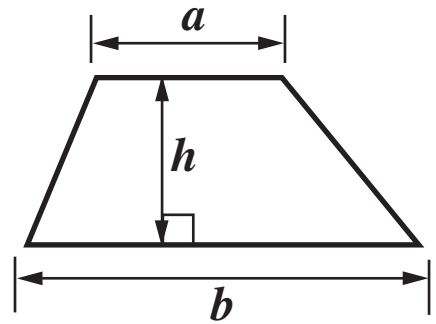
- **Write your name, centre number and candidate number in the boxes on the first page. Please write clearly and in capital letters.**
- **Use black ink. Pencil may be used for graphs and diagrams only.**
- **Read each question carefully. Make sure you know what you have to do before starting your answer.**
- **Show your working. Marks may be given for a correct method even if the answer is incorrect.**
- **Write your answer to each question in the space provided. Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).**
- **Answer ALL the questions.**

## **INFORMATION FOR CANDIDATES**

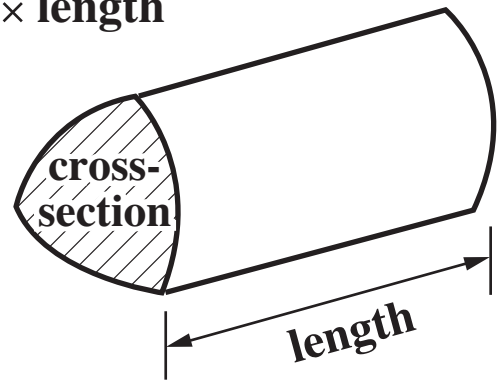
- **The number of marks is given in brackets [ ] at the end of each question or part question.**
- **The total number of marks for this Section is 25.**

# FORMULAE SHEET

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



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



**1 Work out.**

**(a)  $47 + 35 =$  \_\_\_\_\_ [1]**

**(b)  $72 - 19 =$  \_\_\_\_\_ [1]**

**2 Choose a length from the list to complete each sentence.**

**2 mm**

**2 m**

**20 mm**

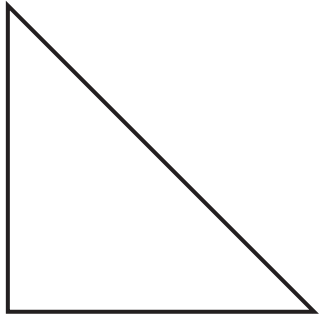
**0.2 m**

**20 m**

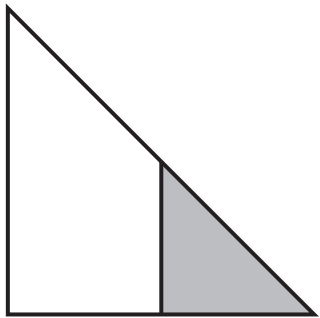
**2 centimetres is the same as \_\_\_\_\_ .**

**200 centimetres is the same as \_\_\_\_\_ . [2]**

3 (a) Grace was asked to shade in one half of this shape.



This is Grace's answer.

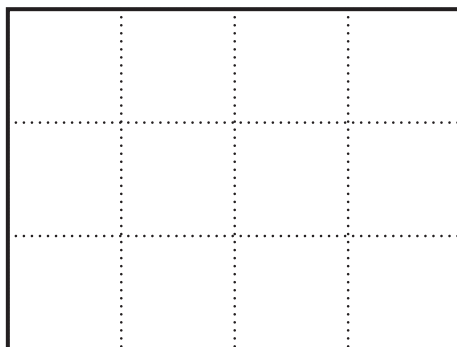


Explain how you know that Grace's answer is wrong.

---

[1]

(b) Shade  $\frac{3}{4}$  of the shape below.



[1]

**(c) Work out  $\frac{1}{4}$  of 20.**

**(c) \_\_\_\_\_ [1]**

- 4 In rugby union points are scored for tries, conversions, penalties and drop goals.  
The points scored for each are shown below.**

<b>Tries</b>	<b>5 points each</b>
<b>Conversions</b>	<b>2 points each</b>
<b>Penalties</b>	<b>3 points each</b>
<b>Drop goals</b>	<b>3 points each</b>

- (a) In one match, Kings Hill score 5 tries.**

**How many points are scored for 5 tries?**

**(a) \_\_\_\_\_ [1]**

- (b) In this match, they also score 3 conversions.**

**How many points are scored for 3 conversions?**

**(b) \_\_\_\_\_ [1]**



**(c) In another match, Cannon Heath score**

**4 tries,  
3 conversions,  
5 penalties.**

**Work out their total points score.**

**(c) \_\_\_\_\_ [3]**

5 (a) Lara has these three number cards.



Write down all the different ways she can arrange these cards in a row.

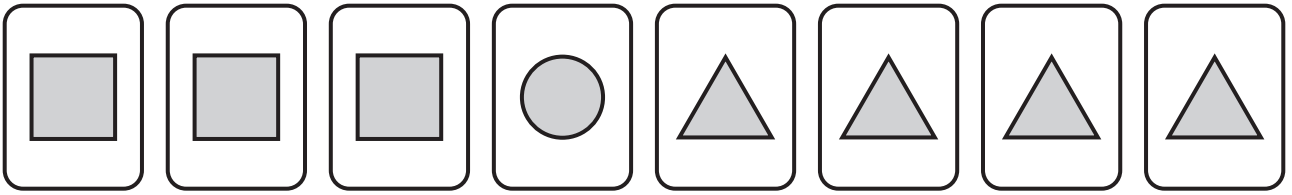
The first one has been done for you.

4	7	9

*You may not need all the rows.*

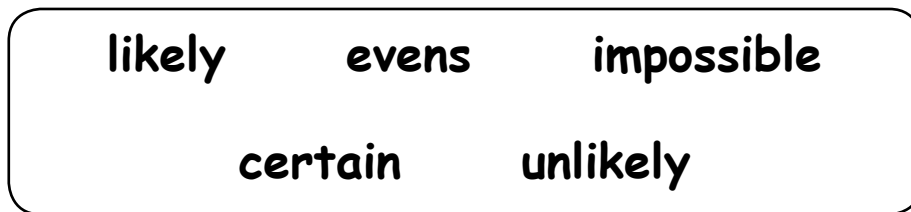
[2]

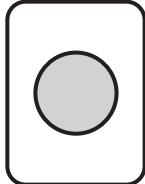
**(b) Jayden has these shape cards.**

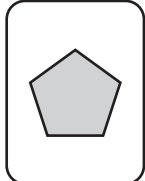


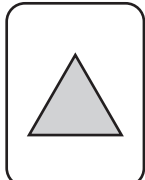
**He takes one card without looking.**

**Choose the best word from this list to complete each of these sentences.**



**It is \_\_\_\_\_ that he takes a  card.**

**It is \_\_\_\_\_ that he takes a  card.**

**It is \_\_\_\_\_ that he takes a  card.**

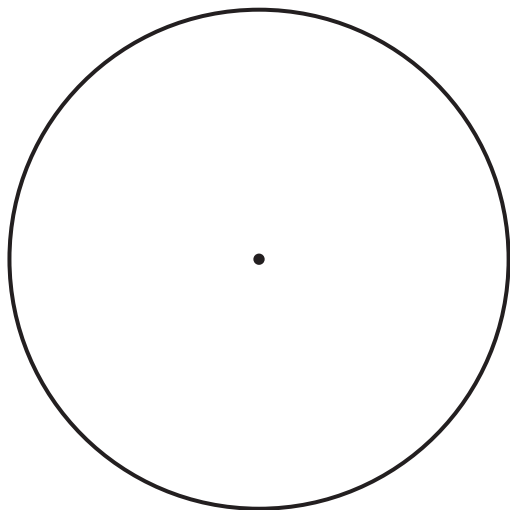
**[3]**

**6 Fill in the missing numbers.**

(a)  $24 \rightarrow$    $\rightarrow$  \_\_\_\_\_ [1]

(b)  $19 \rightarrow$    $\rightarrow 11$  [1]

**7 The centre of this circle is marked.**

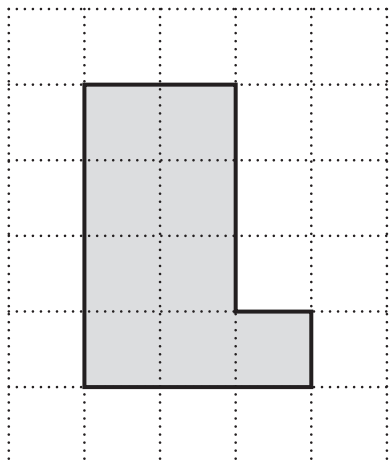


**(a) Draw a radius on the circle. [1]**

**(b) Measure the radius of the circle.  
Give your answer in centimetres.**

**(b) \_\_\_\_\_ cm [1]**

**8 This L-shape is drawn on a centimetre grid.**



**(a) Find the perimeter of the L-shape.**

**(a)** \_\_\_\_\_ cm [1]

**(b) On the grid below, draw a rectangle with the same perimeter as the L-shape.**



**[1]**

**(c) Which shape has the bigger area?  
Show how you decide.**

*Write L-shape  
or Rectangle.*

\_\_\_\_\_ because \_\_\_\_\_  
\_\_\_\_\_ [2]



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