

FOR OFFICIAL USE

--	--	--	--	--	--

F

NATIONAL QUALIFICATIONS 2013

KU RE

--	--

**MATHEMATICS**  
**STANDARD GRADE**  
 Foundation Level  
 Paper 2

**2500/27/02**

FRIDAY, 3 MAY 9.40 AM – 10.20 AM

**Fill in these boxes and read what is printed below.**

Full name of centre

Town



Forename(s)

Surname

Number of seat




Date of birth

Day

Month

Year

Scottish candidate number

--	--

--	--

--	--

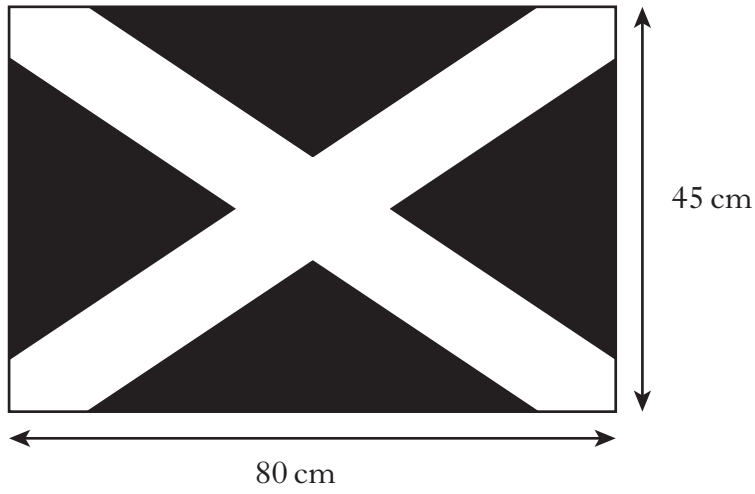
--	--	--	--	--	--	--	--	--	--

- You may use a calculator.**
- Answer as many questions as you can.
- Write your working and answers in the spaces provided. Additional space is provided at the end of this question-answer book for use if required. If you use this space, write clearly the number of the question involved.
- Full credit will be given only where the solution contains appropriate working.
- Before leaving the examination room you must give this book to the Invigilator. If you do not, you may lose all the marks for this paper.

Use **blue** or **black ink**. Pencil may be used for graphs and diagrams only.



1. A rectangular flag is shown below.



Calculate the area of the flag.

WORKING	
ANSWER	square centimetres

Marks

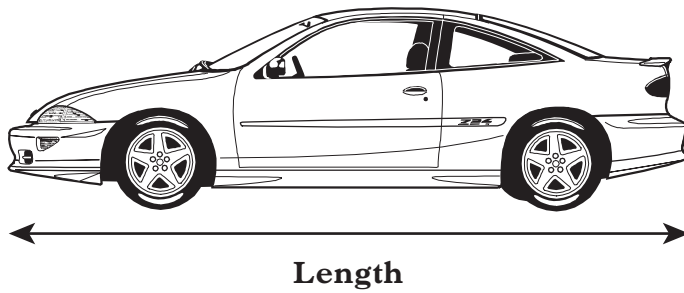
KU	RE
2	



Marks

	KU	RE
1		
2		

2. The scale drawing of a car is shown below.



(a) Measure the length of the car in centimetres.

ANSWER		centimetres
--------	--	-------------

The scale of the drawing is  
**1 centimetre represents 50 centimetres.**

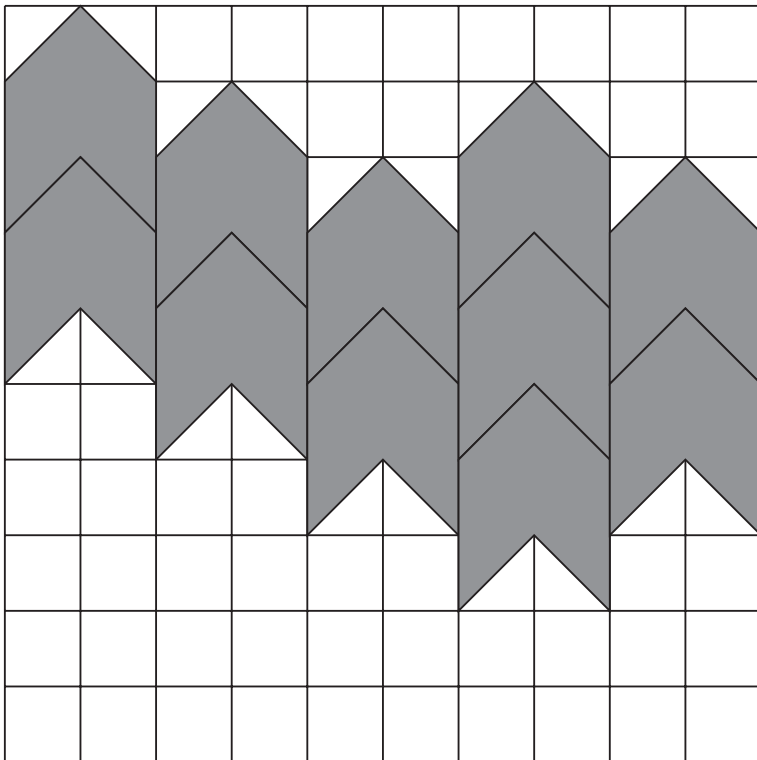
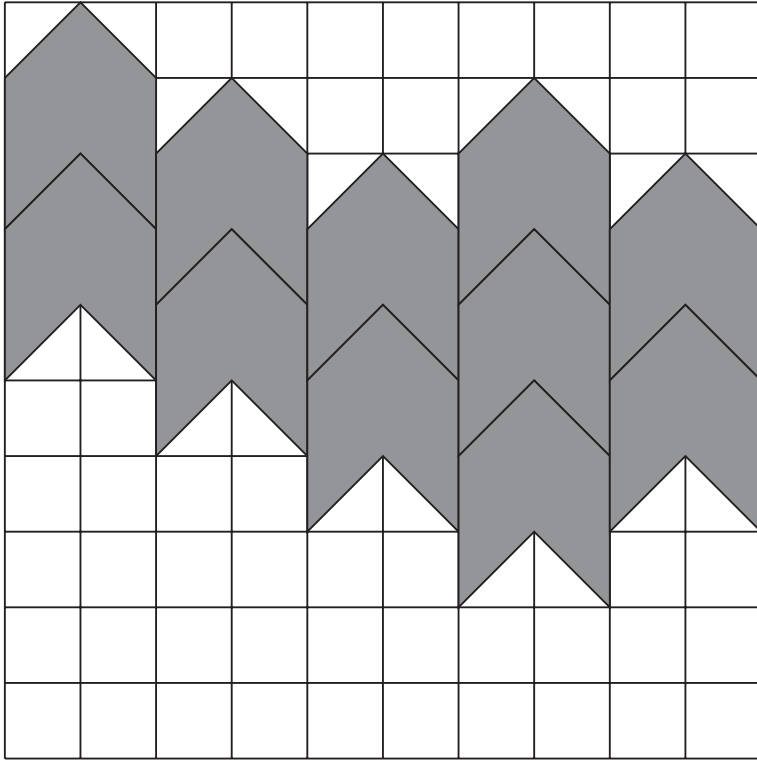
(b) Find the **actual** length of the car in centimetres.

WORKING		
ANSWER		centimetres



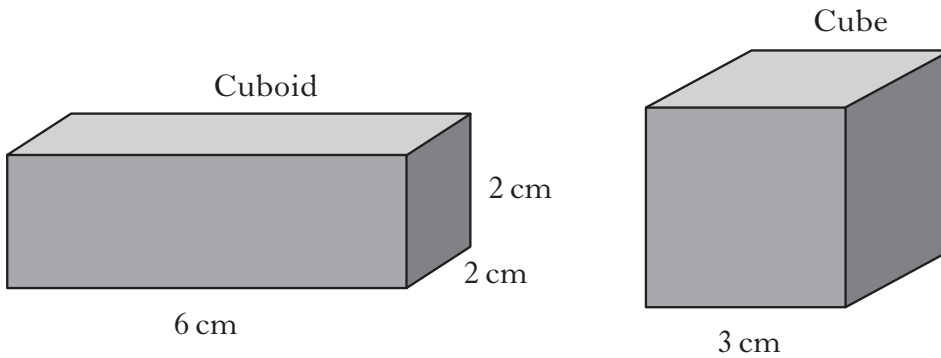


3. (continued)





5. A cuboid and a cube are shown below.



(a) Calculate the volume of the **cuboid**.

WORKING	
ANSWER	cubic centimetres

(b) Which shape has the larger volume?  
**You must give a reason for your answer.**

WORKING	
ANSWER (WITH REASON)	

Marks

	KU	RE
2		
3		







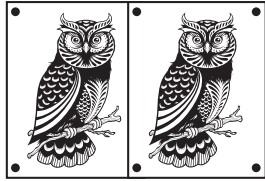
Marks

7. Posters are put on a wall using drawing pins at their corners as shown below.



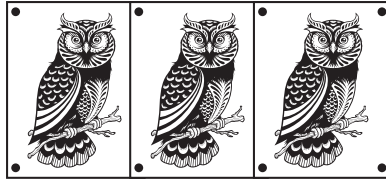
1 poster

4 drawing pins



2 posters

6 drawing pins



3 posters

- (a) Complete the table.

Number of posters	1	2	3	4	5	6		11
Number of drawing pins	4	6						

WORKING

- (b) Write a rule for finding the number of drawing pins if you know the number of posters.

RULE

	KU	RE
4		
2		



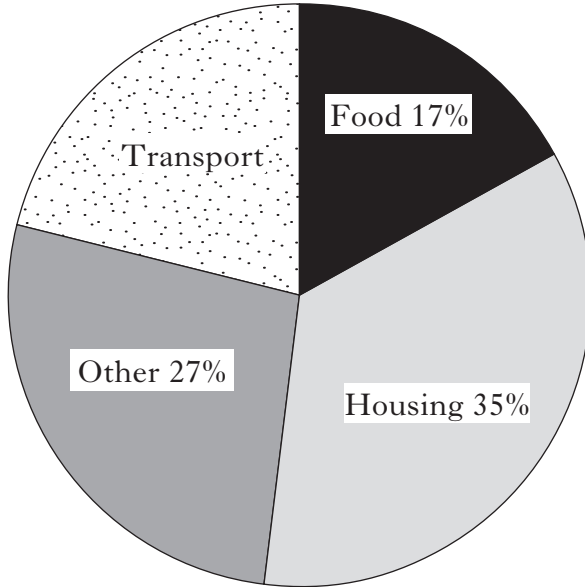


Marks

KU	RE
----	----

9. The pie chart shows how the Khan family spend their annual income.

**Khan Family – Annual Income**



- (a) What percentage of the Khan family's annual income is spent on transport?

WORKING	
ANSWER	%

3

- (b) The Khan family's annual income is £32 000.  
How much money does the Khan family spend on food?

WORKING	
ANSWER	£

3



10. A number is called a palindrome if it reads the same backwards as forwards.

Some examples are shown below.

161    212    353    383

Write down the **first** number, **bigger** than 475, that is a palindrome.

WORKING	
ANSWER	

Marks

KU	RE
2	



11. The opening times of a Recycling Centre are shown below.

<i>Recycling Centre Opening Times</i>	
<i>Summer (April to September)</i>	
Mon – Fri	07 00 – 20 00
Sat – Sun	08 30 – 17 00
<i>Winter (October to March)</i>	
Mon – Fri	07 00 – 17 00
Sat – Sun	08 30 – 16 00

For how long is the Recycling Centre open on Saturday 9th February?

WORKING	
ANSWER	hours                  minutes

Marks

KU	RE
3	

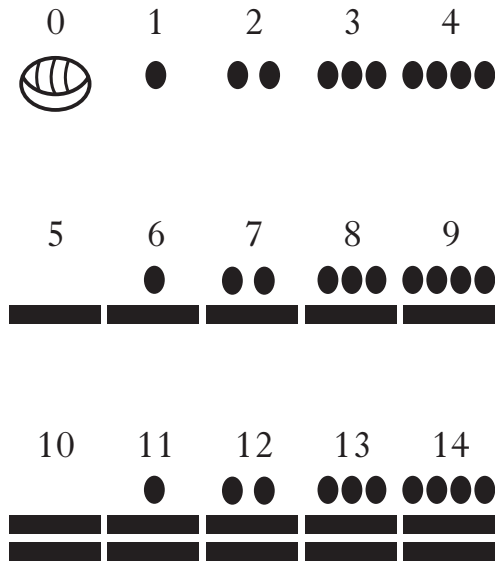




Marks

KU	RE
----	----

13. The ancient Mayan civilization in Mexico used a counting system based on dots and bars.
- The chart below shows some numbers in the Mayan counting system.



In our counting system,  $3 + 5 = 8$

In the Mayan counting system,  +  = 

- (a) Write the calculation  $4 + 6 + 7$  in the Mayan counting system.

ANSWER	

1

- (b) Write the answer to  $4 + 6 + 7$  in the Mayan counting system.

WORKING	
ANSWER	

3



