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FOR OFFICIAL USE	=					F	
NATIONAL Q	UALIFICA	TIO	NS 2013		KU	RE	
MATHEM	IATICS						

MATHEMATICS STANDARD GRADE

Foundation Level Paper 2

FRIDAY, 3 MAY 9.40 AM - 10.20 AM

2500/27/02

Full	name of centre					Tov	vn					
Fore	name(s)			Surname						Num	nber o	f seat
	of birth Day Month	ı Ye	ar	Scotti	sh car	ndidat	te nun	nber				
1 Y	ou may use a ca	lculator.										
2 A	nswer as many qu	uestions as	you ca	n.								
	Vrite your working											
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e n	nd of this questio	stion involve	ed.			ns app	oropria	ate wo	rking.			

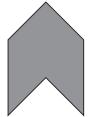


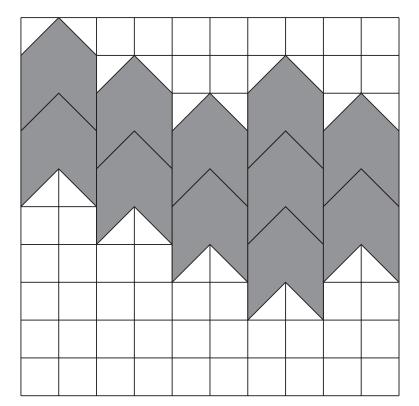


	Marks	KU	RI
A rectangular flag is shown below.			
45 cm			
₹ 80 cm			
Calculate the area of the flag.			
Calculate the area of the flag. WORKING			

			Marks	KU	R
The	scale drawing of	a car is shown below.			
		Length			
(a)	Measure the ler	ngth of the car in centimetres.			
	ANSWER	centimetres	1		
		The scale of the drawing is etre represents 50 centimetres.			
(b)	Find the actua	1 length of the car in centimetres.			
	WORKING	centimetres	2		
			2		
			2		
			2		

The pattern below is made with tiles shaped as follows. 3.

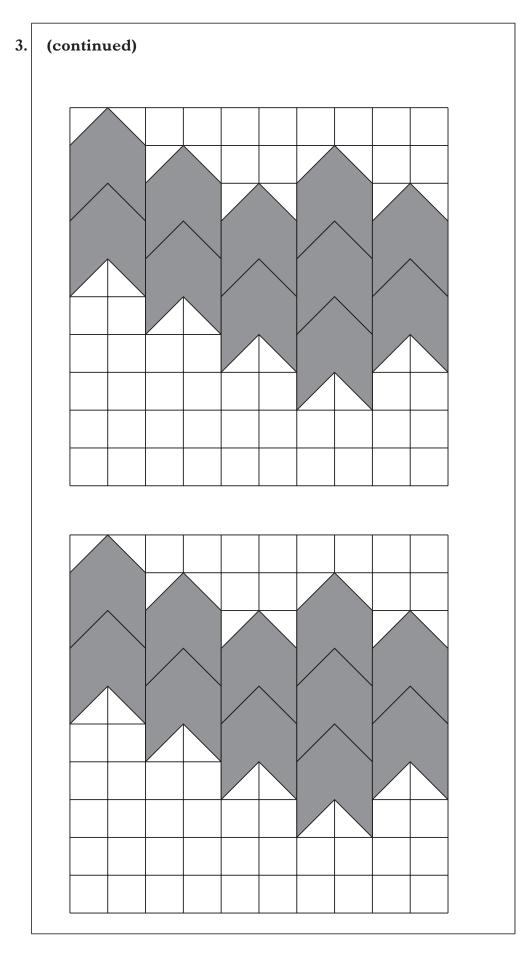




Draw three more tiles to continue the pattern.

YOU MAY USE THE EXTRA DIAGRAMS ON THE OPPOSITE PAGE FOR WORKING IF YOU WISH.







M	arks	

KU RE

4. Mrs Walsh is making some home improvements.

She needs the joiner, plumber and electrician to **work together** for 3 days in October.

These are the dates that they are available in October.

Joiner 8th \rightarrow 20th

Plumber $15th \rightarrow 22nd$

Electrician Any day except Fridays, Saturdays and Sundays

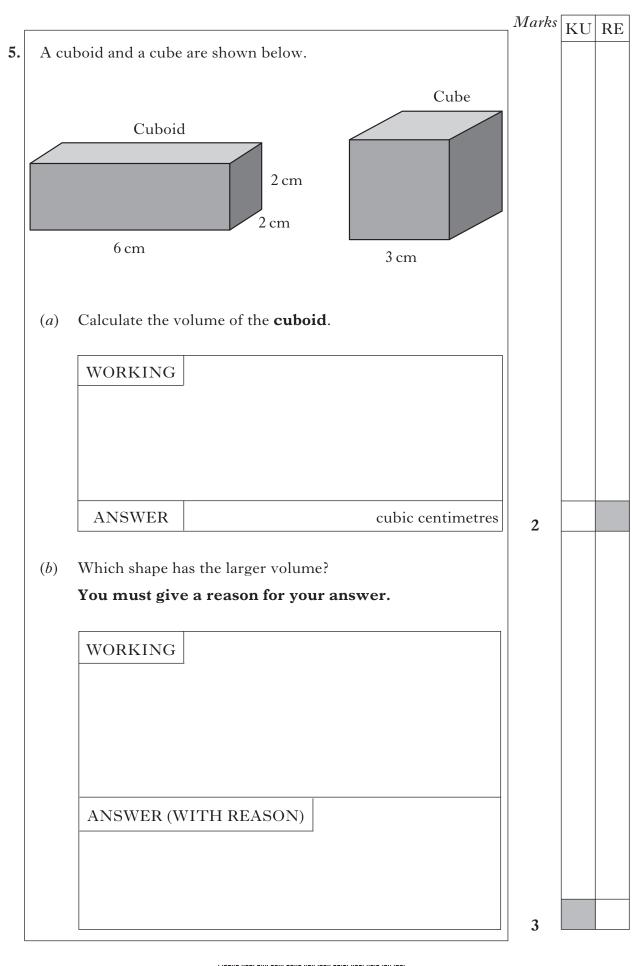
Use the calendar for October, shown below, to find the 3 dates that Mrs Walsh can book the joiner, plumber and electrician to work together.

OCTOBER

Mon	Tue	Wed	Thu	Fri	Sat	Sun
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

WORKING	
ANSWER	





Marks KU RE

David is taking his 3 grandchildren to the **6.** cinema.

He buys the tickets online.

CINEMA: Cost of	of tickets
Adult	£8·20
Child	£5·30
Senior	£5·40
Student	£5.60
Online Booking Fee	£0.50 per ticket

David's ticket is at the senior rate.

His grandchildren's tickets are all at the child rate.

What was the total cost?

£ ANSWER





KU F

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









1 poster

2 posters

3 posters

4 drawing pins 6 drawing pins

(a) Complete the table.

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

WORKING

RULE

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

4



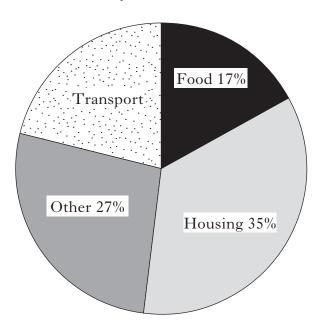
	Marks	KU	F
Eve is paid £ 7.50 per hour.			
(a) How much is Eve paid for working 4	hours?		
WORKING			
WORKING			
ANSWER £			
THISWER &	2		
(b) When Eve works overtime, she is pai	id double time		
Eve is paid £90 for working overtime			
How many hours of overtime did she	e work!		
WORKING			
			L
ANSWER	hours 3		

Marks

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	
ANSWED	0/_

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

WORKING		
ANSWER	£	

3



	_ Wiarrs	KU	RE
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	2		

π	~
IVI	nrRs

KU RE

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

Recycling Centre Op	ening Times
Summer (April to S	September)
Mon – Fri	07 00 - 20 00
Sat – Sun	08 30 - 17 00
Winter (October to	o March)
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
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Marks KU RE

The number of children with broken bones attending a hospital is 12. shown in the table below.

Month	Number of children
January	8
February	7
March	7
April	7
May	4
June	7
July	9
August	4
September	5
October	2
November	5
December	7



Calculate the mean number of children with broken bones attending the hospital per month.

children



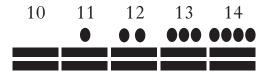
Marks

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

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

MORKING

ANSWER

3

A tribelo	ractor tyre is 35 centimetres high when positioned as ow.	shown	Marks	KU
(a)	Write 35 centimetres in metres. WORKING			
(b)	ANSWER n A farmer stacks tractor tyres in	netres	2	
	piles. For safety reasons, the maximum height of a pile of tyres is 2 metres. What is the maximum number of these tyres which can be safely stacked in a single pile?			
	WORKING			