

FOR OFFICIAL USE

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NATIONAL QUALIFICATIONS 2013

# MATHEMATICS STANDARD GRADE

Foundation Level

Paper 1

Non-calculator

FRIDAY, 3 MAY 9.00 AM – 9.20 AM

	KU	RE
Paper 1		
Paper 2		
<b>Total</b>		



\* 2 5 0 0 2 7 0 1 \*

## 2500/27/01

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

1 You may **NOT** use a calculator.

2 Answer as many questions as you can.

3 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.

4 Full credit will be given only where the solution contains appropriate working.

5 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.



\* 2 5 0 0 2 7 0 1 0 1 \*

1. Work out the answers to the following.

(a)  $6427 + 125$

WORKING	
ANSWER	

(b)  $47.2 \times 3$

WORKING	
ANSWER	

(c) 20% of £500

WORKING	
ANSWER	£

Marks

	KU	RE
1		
1		
2		



2. In a golf club,  $\frac{1}{4}$  of the members vote to increase the membership fees.

The golf club has 720 members.

How many members vote to increase the membership fees?



WORKING	
ANSWER	members

Marks

	KU	RE
2		



Marks

KU	RE
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3. A health spa offers the following treatments during a day visit.



Session 1 can be **Yoga** or **Aromatherapy**

Session 2 can be **Sauna** or **Facial**

Session 3 can be **Manicure** or **Pedicure**

The table below shows one possible combination.

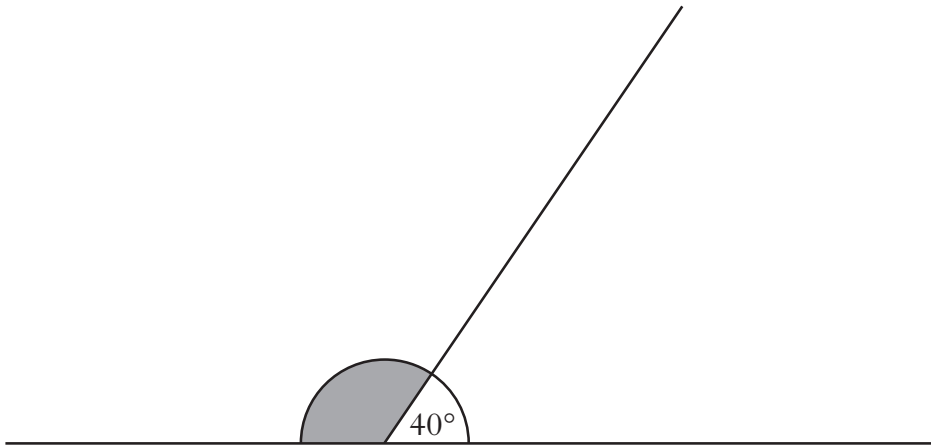
<i>Session 1</i>	<i>Session 2</i>	<i>Session 3</i>
Yoga	Facial	Pedicure

Complete the table to show five other possible combinations.

3




4. Calculate the size of the shaded angle.



WORKING

ANSWER

°

Marks

KU	RE
----	----

2



5. George is going to knit a sweater.

He needs to buy 10 balls of wool and 2 pairs of knitting needles.



One ball of wool costs £3.

One pair of knitting needles costs £2.50.

How much will it cost George to knit the sweater?

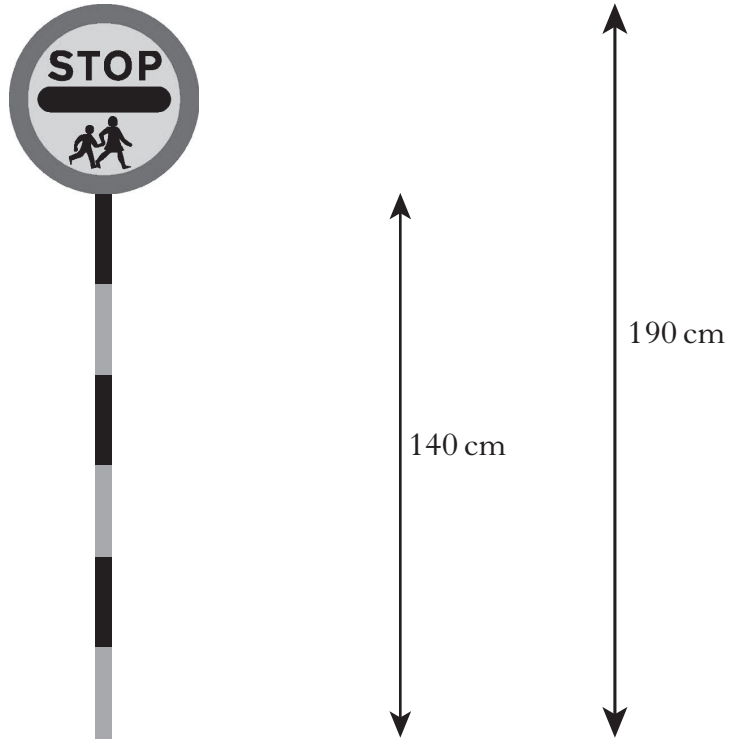
WORKING	
ANSWER	£

Marks

KU	RE
3	



6. A crossing patrol sign is made using a pole with a circle on top.



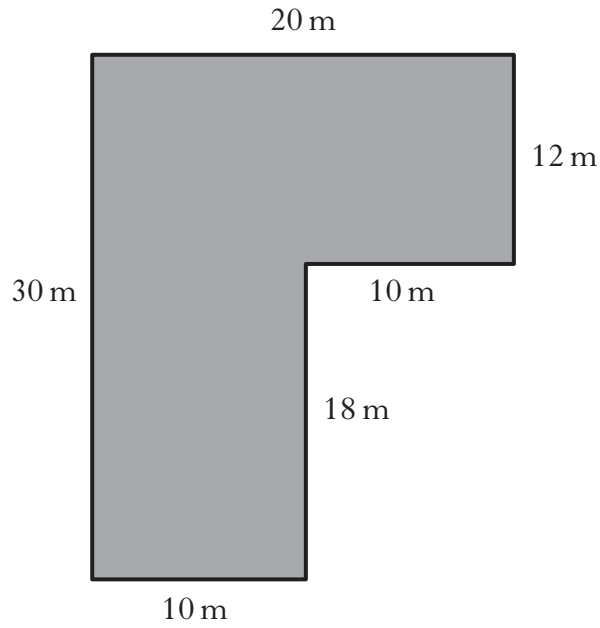
The crossing patrol sign is 190 centimetres long.  
 The pole is 140 centimetres long.  
 Calculate the radius of the circle.

WORKING	
ANSWER	centimetres

<i>Marks</i>	KU	RE
3		



7. The drawing shows Mary's lawn.



(a) Mary has to clip the grass round the edge of the lawn.  
What length of edge does Mary have to clip?

WORKING	
ANSWER	metres

(b) Mary takes 10 minutes to clip the 20 metre edge of her lawn.  
If she continues to work at the same rate, how long will it take her to clip all the edges?

WORKING	
ANSWER	minutes

Marks

	KU	RE
2		
3		





8. Study the calculations shown below.

$$1 \times 1 = 1$$

$$11 \times 11 = 121$$

$$111 \times 111 = 12321$$

$$1111 \times 1111 = 1234321$$

What is the value of  $11111 \times 11111$ ?

ANSWER	
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Marks

KU	RE
1	



Marks

	KU	RE
1		
2		

9. A multi-storey car park has 3 levels underground and 5 levels above ground.  
 Ground level is marked Level 0.  
 The levels are connected by a lift.

Level 5	⊙
Level 4	⊙
Level 3	⊙
Level 2	⊙
Level 1	⊙
Level 0	⊙
Level -1	⊙
Level -2	⊙
Level -3	⊙

When the lift starts at Level 2 and goes down 3 levels, it arrives at Level -1.

- (a) The lift starts at Level 1 and goes down 4 levels.  
 Where will it arrive?

WORKING	
ANSWER	Level

1

- (b) The lift starts at Level -2, goes up 6 levels, then down 5 levels.  
 Where will it arrive?

WORKING	
ANSWER	Level

2

[END OF QUESTION PAPER]



ADDITIONAL SPACE FOR ANSWERS

*Marks*

KU	RE



ADDITIONAL SPACE FOR ANSWERS

*Marks*

KU	RE

