

FOR OFFICIAL USE

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F

KU RA

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Total Marks

2500/401

NATIONAL
QUALIFICATIONS
2000

THURSDAY, 18 MAY
9.00 AM - 10.10 AM

MATHEMATICS
STANDARD GRADE
Foundation Level

Answer as many questions as you can.

			Town	
Forename(s)			Surname	
Day of birth	Month	Year	Scottish candidate number	
			Number of seat	

Answer as many questions as you can.

Read carefully and write your answers clearly in the spaces provided. Show all your working.

When leaving the examination room you must give this book to the invigilator. If you do not, you will lose all the marks for this paper.

Marks

KU	RA
3	
3	
3	

1. This question will be read to you.

NOTES/WORKING	
ANSWER	£

2. This question will be read to you.

NOTES/WORKING	
ANSWER	rolls

3. This question will be read to you.

NOTES/WORKING	
ANSWER	seconds

Marks

KU	RA
4	

4. This question will be read to you.

NOTES/WORKING

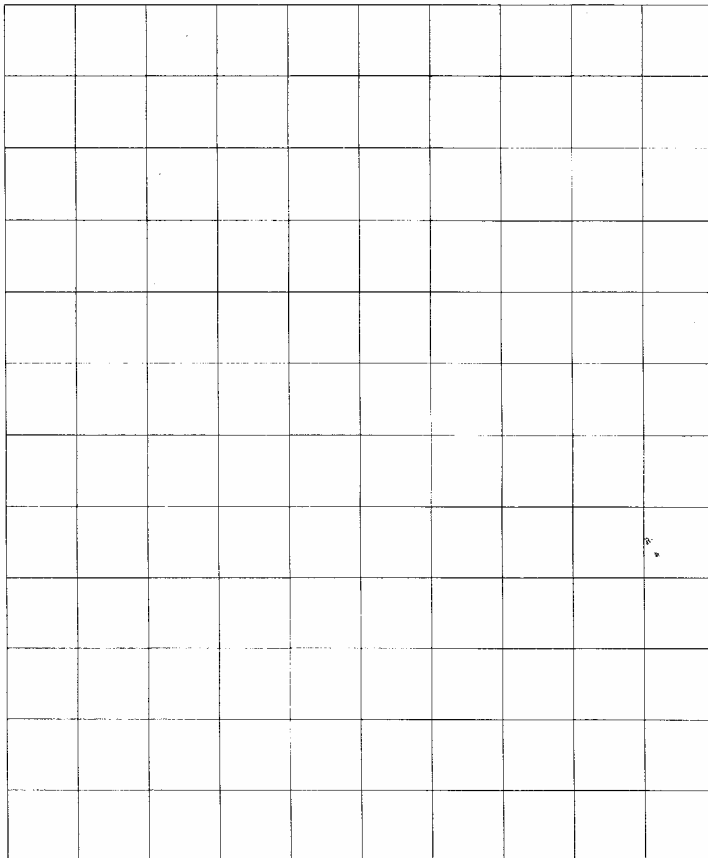
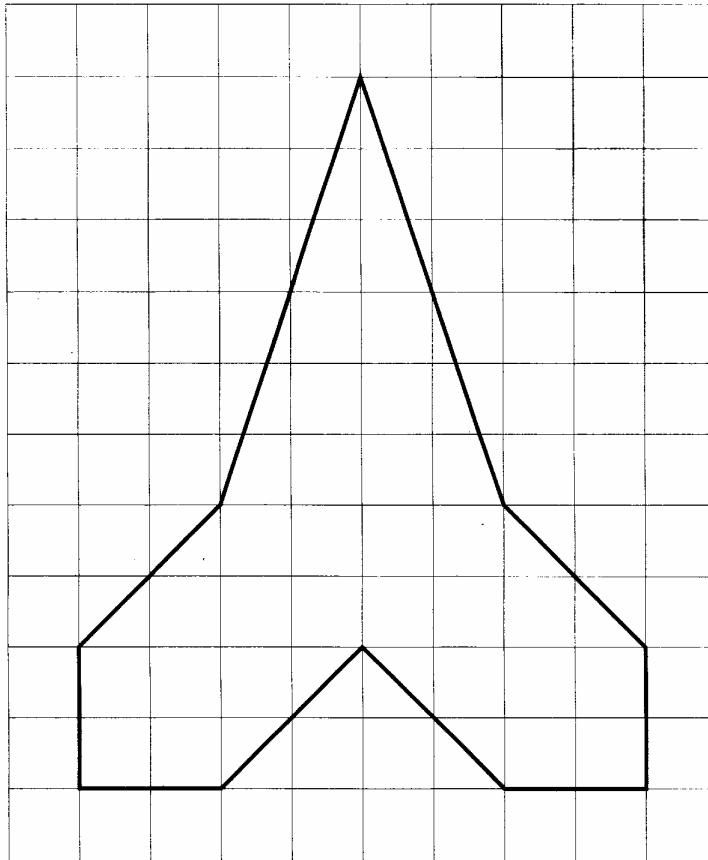
ANSWER

miles

Marks

KU	RA

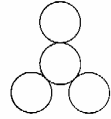
5. Draw this shape on the grid below.
Make each of its sides half as long.



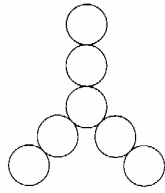
Marks

KU	RA
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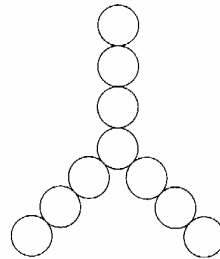
6. These patterns are made with circles.



Pattern 1



Pattern 2



Pattern 3

(a) Complete this table.

Pattern number	1	2	3	4	5	6		11
Number of circles	4	7						

4

WORKING

(b) Write down a rule for finding the number of circles if you know the pattern number.

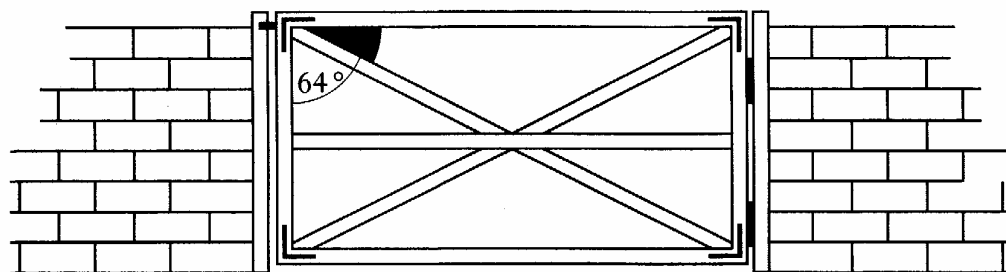
RULE

2

Marks

KU RA

7. The angle at each corner of this gate is a right angle.
Calculate the size of the shaded angle.



WORKING

ANSWER

°

2

9. This is a multiplication square.

5	×	2	=	10
×		×		×
4	×	3	=	12
=		=		=
20	×	6	=	120

(a) Complete this multiplication square.

4	×	6	=	
×		×		×
3	×	5	=	
=		=		=
	×		=	

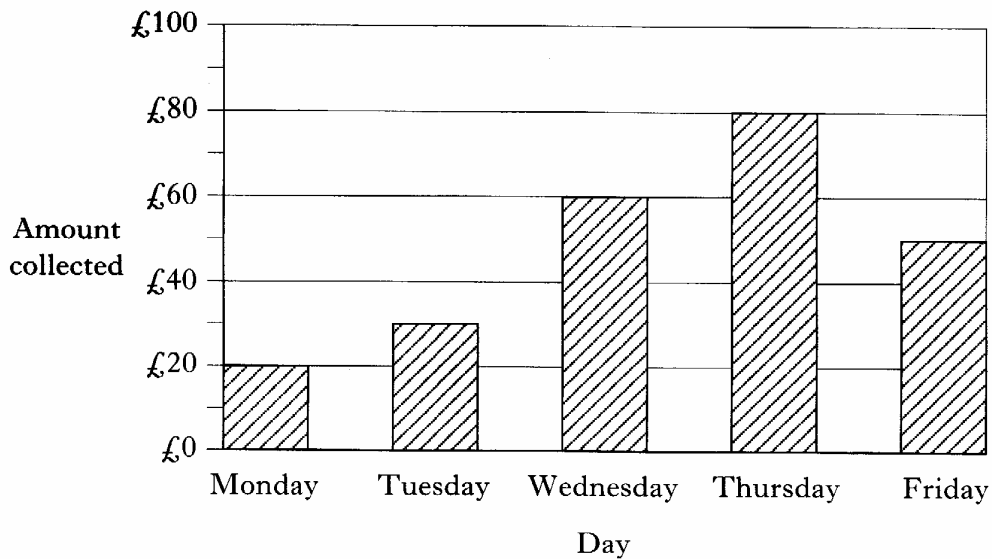
(b) Complete this multiplication square.

5	×		=	
×		×		×
	×		=	16
=		=		=
	×	18	=	720

Marks

	KU	RA
1		
4		

10. A group of friends collected money for charity by packing bags in a supermarket.
The graph shows how much they collected each day.



- (a) How much did they collect on Tuesday?

ANSWER	£
--------	---

1

- (b) Calculate the **average** amount of money they collected each day.

WORKING	
ANSWER	£

4

Marks

KU	RA
----	----

11. This container holds 3 litres of milk when full.

How much milk is in the container when it is one fifth full?

Give your answer in millilitres.

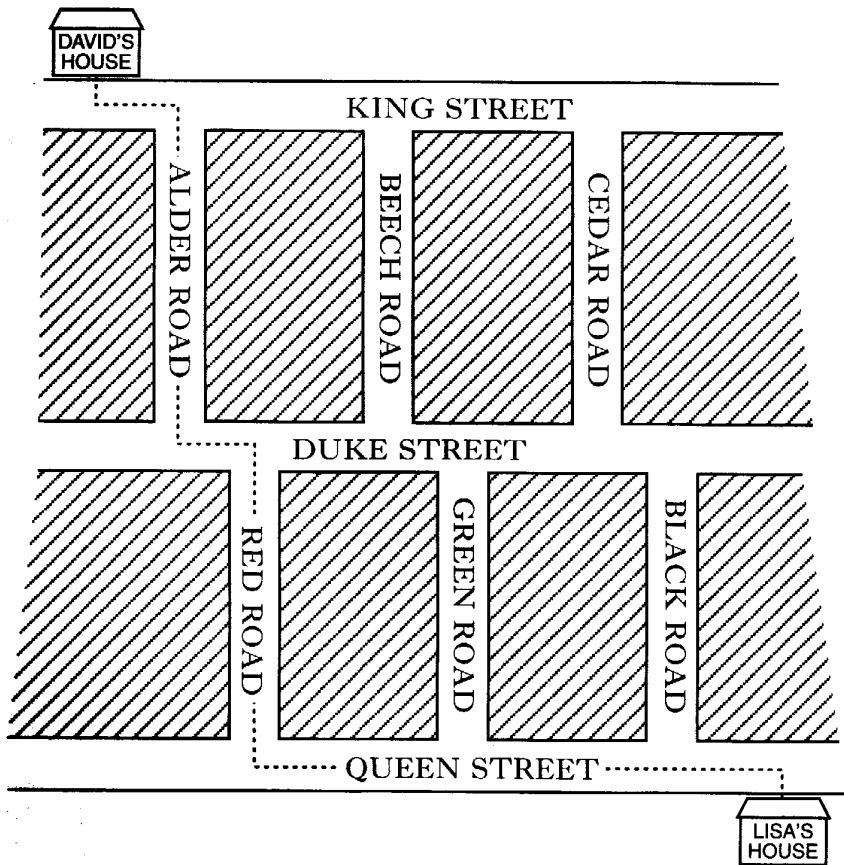


WORKING	
ANSWER	millilitres

4



12. The map shows where David and Lisa live.



One way of going from David's house to Lisa's house is shown.

King Street → Alder Road → Duke Street → Red Road → Queen Street		
King Street	Duke Street	Queen Street
King Street	Duke Street	Queen Street
King Street	Duke Street	Queen Street
King Street	Duke Street	Queen Street
King Street	Duke Street	Queen Street

Complete the table to show five other possible ways of going from David's house to Lisa's house.

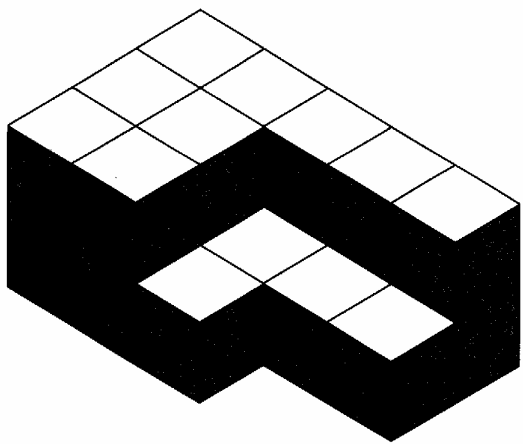


Marks

KU	RA
----	----

13. (continued)

(b) If the box in part (a) is full of cubes are there enough to make this stack?



Give a reason for your answer.

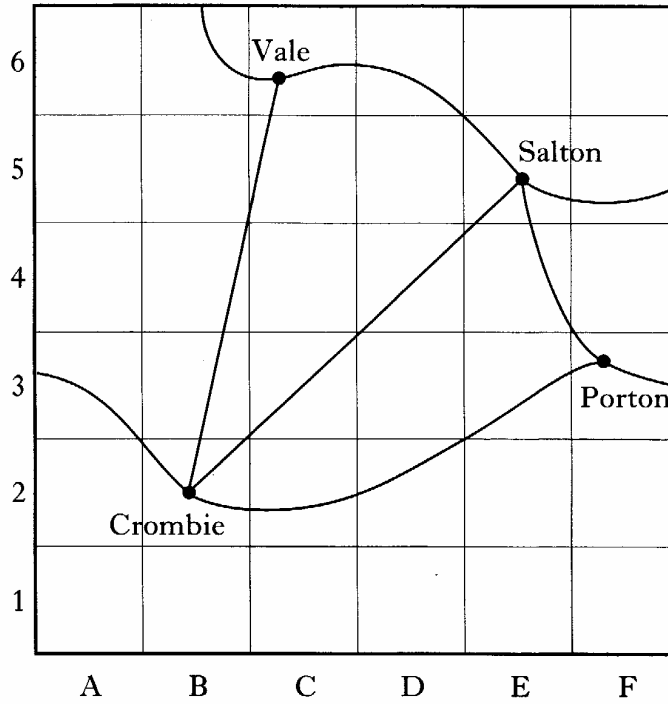
WORKING

ANSWER (INCLUDING REASON)

4

	KU	RA
1		
1		
2		

14. This map shows four villages and the roads linking them.



(a) Which village is in square E5?

ANSWER	
--------	--

1

(b) Measure the distance from Crombie to Salton **on the map**.

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

1

(c) The scale of the map is **1 centimetre represents 2.5 kilometres**.

Find the actual distance from Crombie to Salton.

WORKING	
ANSWER	kilometres

2

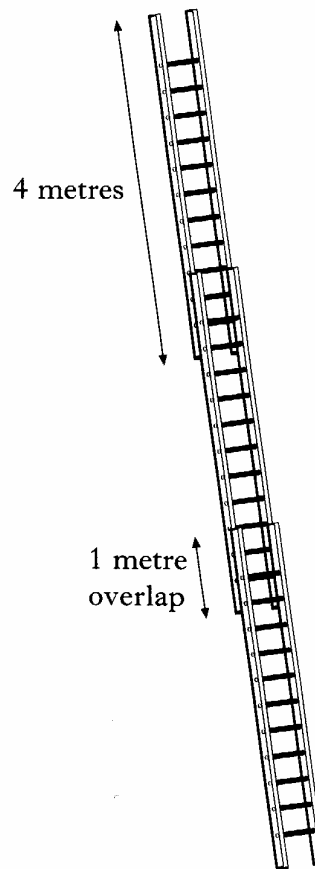
15.

A ladder has three sections.

Each section is 4 metres long.

For safety reasons the sections must **overlap** by one metre when the ladder is fully extended.

What length is the ladder when it is fully extended?



WORKING

ANSWER

metres

Marks

KU

RA

2

Marks

	KU	RA
2		
2		

16. The table shows sunrise and sunset times on Saturdays in April.

DATE	SUNRISE	SUNSET
April 1st	0645	2000
April 8th	0625	2010
April 15th	0610	2030
April 22nd	0550	2040
April 29th	0535	2055

- (a) On April 8th sunrise is at 6·25am.
 When is sunset on that day?
 Give your answer as a **12 hour time**.

WORKING		
ANSWER		pm

2

- (b) How long is it from sunrise to sunset on April 8th?

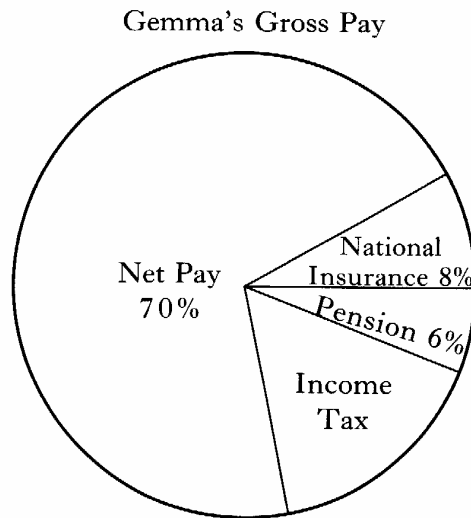
WORKING		
ANSWER	hours	minutes

2

Marks

KU	RA
----	----

17. The pie chart shows the items that make up Gemma's gross pay.



- (a) What percentage of her gross pay is income tax?

WORKING

ANSWER

%

3

- (b) Gemma's gross pay is £1800.
Calculate her net pay.

WORKING

ANSWER

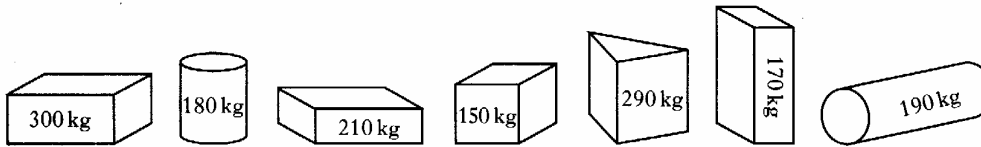
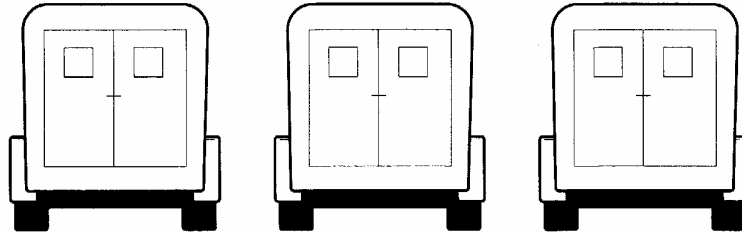
£

3

Marks

KU	RA
3	

18. The seven boxes shown below have to be loaded into three vans.
 Each van can carry no more than 500 kilograms.
 Show a way of loading all the boxes into the three vans.



WORKING			
ANSWER	VAN 1	VAN 2	VAN 3

YOU MAY USE THE BLANK WORKING BOXES ON THE OPPOSITE PAGE IF YOU WISH.

18. (continued)

VAN 1	VAN 2	VAN 3

VAN 1	VAN 2	VAN 3

VAN 1	VAN 2	VAN 3

VAN 1	VAN 2	VAN 3

Marks

KU RA

--	--

Marks

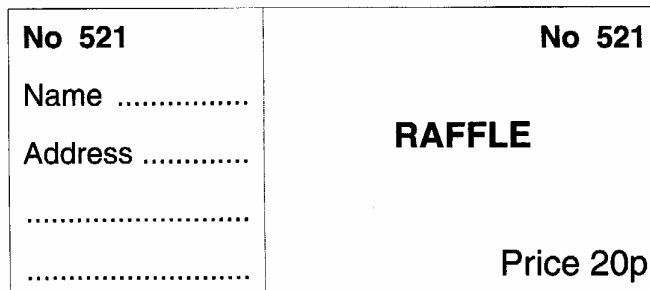
KU	RA
2	
2	

19. (a) A book of raffle tickets contains 10 tickets.
 Each ticket costs 20 pence.
 How much does a book of raffle tickets cost?

WORKING

ANSWER	£
--------	---

- (b) The number on the first ticket in a book is 521.



What is the number on the last ticket in this book?

WORKING

ANSWER	
--------	--

Marks

KU	RA
2	
2	

19. (a) A book of raffle tickets contains 10 tickets.
Each ticket costs 20 pence.
How much does a book of raffle tickets cost?

WORKING	
ANSWER	£

- (b) The number on the first ticket in a book is 521.

No 521	No 521
Name	RAFFLE
Address	
.....	
.....	
	Price 20p

What is the number on the last ticket in this book?

WORKING	
ANSWER	

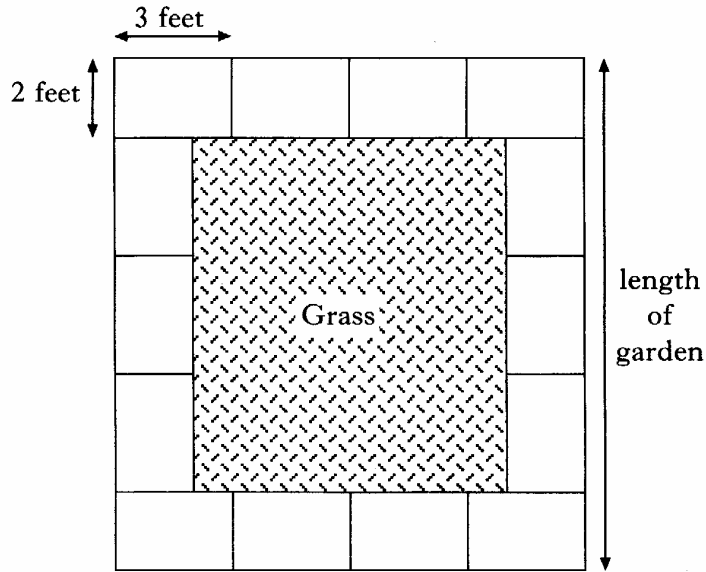
Marks

KU	RA

20.

This garden has grass in the centre and slabs around the edges.

Each slab measures 3 feet by 2 feet.



(a) Find the length of the garden.

WORKING	
ANSWER	_____ feet

2

(b) Find the area of the grass.

WORKING	
ANSWER	_____ square feet

4

[END OF QUESTION PAPER]