

FOR OFFICIAL USE

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F

KU

RE

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Total Marks

2500/401

NATIONAL
QUALIFICATIONS
2009

WEDNESDAY, 6 MAY
9.00 AM – 9.20 AM

MATHEMATICS
STANDARD GRADE
Foundation Level
Paper 1
Non-calculator

Fill in these boxes and read what is printed below.

Full name of centre

--

Town

--

Forename(s)

--

Surname

--

Date of birth

Day Month Year

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

Scottish candidate number

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

Number of seat

--

- 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.



[illegible]

- (a) $2345 + 372$

ANSWER	
--------	--

1

ANSWER	$\mathcal{L}$
--------	---------------

1

ANSWER	
--------	--

2

[illegible]

-
- A 10x10 grid with a shaded double-headed arrow shape in the center. The arrow is composed of a central 4x2 rectangle and four triangles at the ends, all shaded light gray with a thick black outline. The central rectangle spans from column 2 to column 6 and row 4 to row 6. The left triangle is formed by vertices at (1,4), (2,4), (2,6), and (1,5). The right triangle is formed by vertices at (6,4), (6,6), (7,6), and (7,5).

ANSWER	square centimetres
--------	--------------------

2

Marks

KU

RE

- 3.** Round £23.25 to the nearest pound.

ANSWER

$$\mathcal{L}$$

- | | |
|----|------------------------------------|
| 4. | Work out $33\frac{1}{3}\%$ of £30. |
|----|------------------------------------|

WORKING

ANSWER

$$\mathcal{L}$$

1

2

[illegible]

-
- A black and white line drawing of a woman with long, dark hair. She is smiling and looking slightly to the right. Her right hand is raised, with her index finger pointing towards her cheek. She is wearing a simple, light-colored top. The drawing style is clean and minimalist, with some shading on her face and hair.

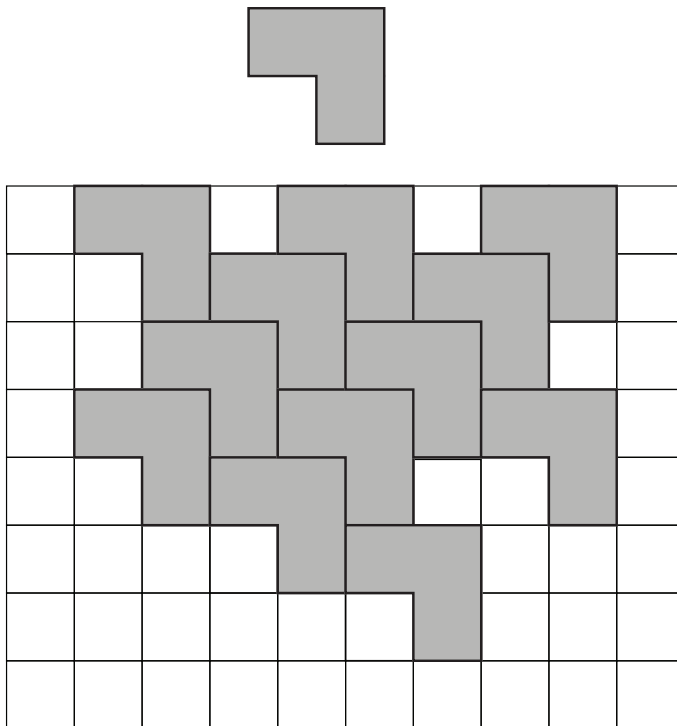
2

Marks

KU	
----	--

RE

6. The pattern below is made with tiles like the one shown here.



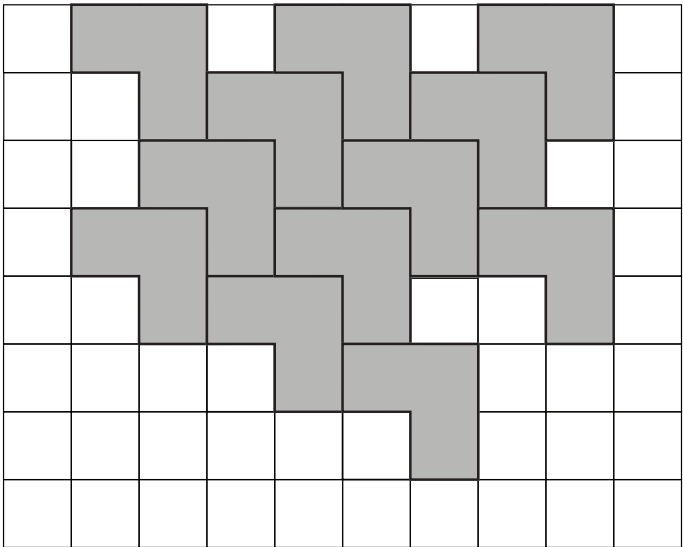
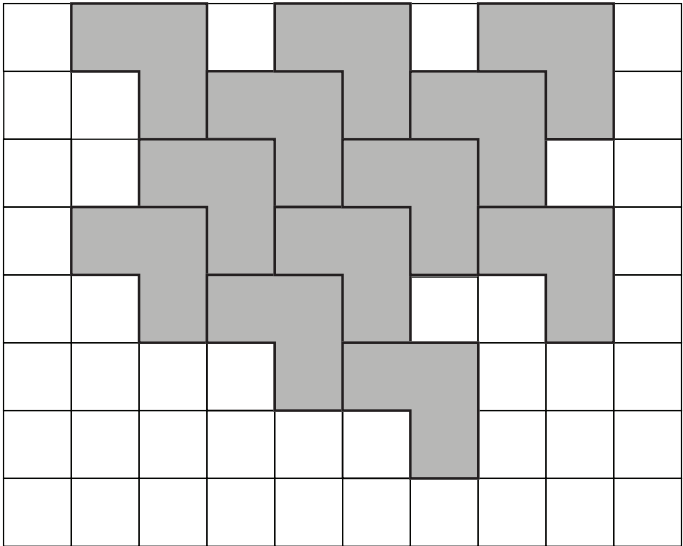
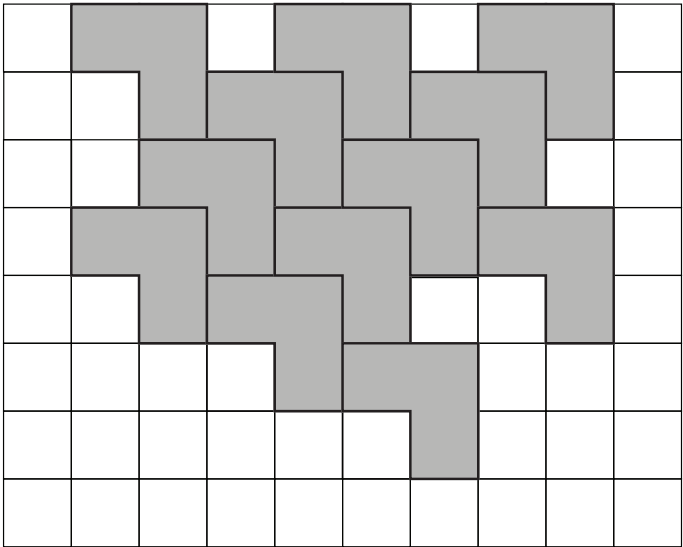
Draw three more tiles to continue the pattern.

3

You may use the extra diagrams on the opposite page for working if you wish.

6. (continued)

Marks	KU	RE



[illegible]

- | | |
|---------|--|
| WORKING | |
| | |
| ANSWER | |

WORKING	
ANSWER	minutes

3

[illegible]

- He was born on the 12th August 1996.

12	08	96
----	----	----

She was born on the 16th April 1998.

Show how Elaine will write her date of birth on her application form.

--	--	--

1

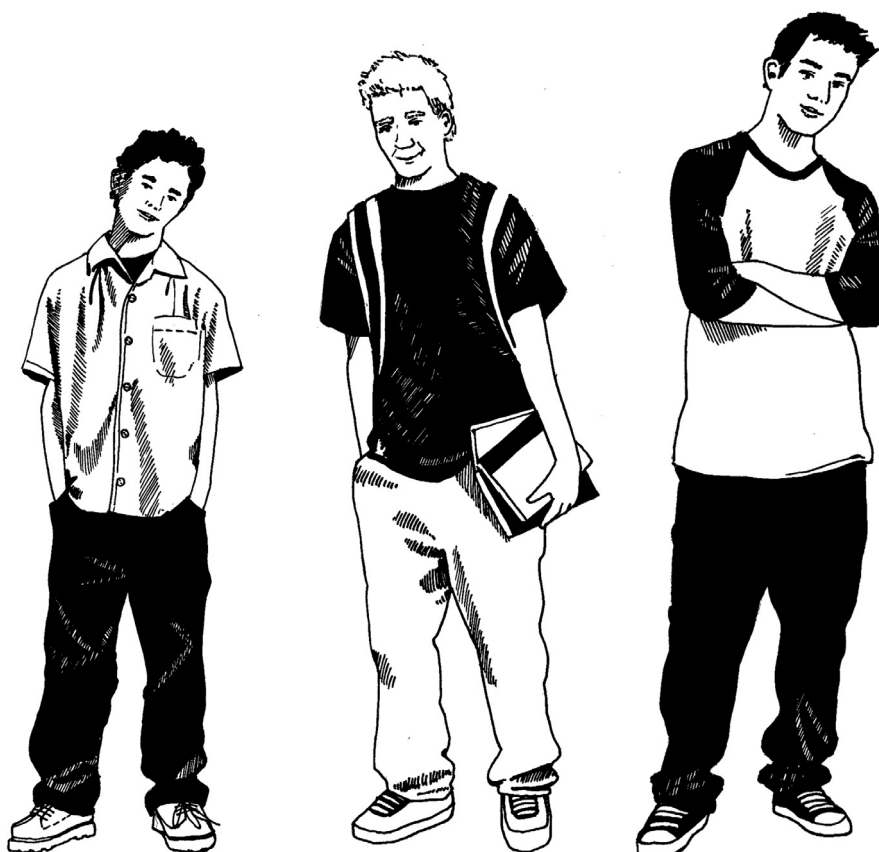
- His code is 12PD9608.

Write down the membership code for Elaine Davidson.

2

[illegible]

- WORKING



--	--	--

3

KU	RE

- | | QUESTION | ANSWER |
|----|---------------|----------|
| 1. | $1 \div 11 =$ | 0.090909 |
| 2. | $2 \div 11 =$ | 0.181818 |
| 3. | $3 \div 11 =$ | 0.272727 |
| 4. | $4 \div 11 =$ | 0.363636 |

5. $5 \div 11$	=	
----------------	---	--

[END OF QUESTION PAPER]

ADDITIONAL SPACE FOR ANSWERS

FOR OFFICIAL USE

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F

KU

RE

--	--

Total Marks

2500/402

NATIONAL
QUALIFICATIONS
2009

WEDNESDAY, 6 MAY
9.40 AM – 10.20 AM

MATHEMATICS
STANDARD GRADE
Foundation Level
Paper 2

Fill in these boxes and read what is printed below.

Full name of centre

Town

Forename(s)

Surname

Date of birth

Day Month Year

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

Scottish candidate number

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

Number of seat

- 1 You may use a calculator.**
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[illegible]

-

ANSWER

 $\mathcal{L}$

[illegible]

-
- A black and white illustration of a man and a woman at a vending machine. The man, on the left, is seen from the back, wearing a backpack and a light-colored jacket, and is inserting a coin into the machine. The woman, on the right, is facing him, holding a cup, and looking at the machine's controls. The machine has several buttons and a coin slot.

The *size* can be **Large** or **Small**

The table below shows one possible combination.

<i>Drink</i>	<i>Size</i>	<i>Colour</i>
Tea	Small	White

3

[illegible]

-
- A 3D diagram of a rectangular prism. The front face is shaded gray. The dimensions are labeled: 6 cm for the length of the front edge, 4 cm for the width of the side edge, and 3 cm for the height of the vertical edge.

WORKING	
ANSWER	cubic centimetres

2

[illegible]

-
- 1 box
3 vases
- 2 boxes
5 vases

Number of boxes	1	2	3	4	5	6		11
Number of vases	3	5						

KU	RE

- | | COST PER WEEK | | |
|--------------|---------------|----------|-------|
| | January | February | March |
| Hotel Spruce | £230 | £240 | £255 |
| Hotel Alpine | £215 | £235 | £250 |
| Hotel Nordic | £190 | £220 | £240 |

- | | |
|--------|-----------|
| ANSWER | $\pounds$ |
|--------|-----------|

- | | | | | |
|---------|-------|--|-------|--|
| WORKING | | | | |
| | | | | |
| ANSWER | Hotel | | Month | |

[illegible]

-
- A thermometer with a bulb at the bottom and a scale on the right. The scale has major markings at 0 °C, -10 °C, -20 °C, and -30 °C. The liquid level is at -25 °C.

ANSWER	°C
--------	----

1

[illegible]

- 1**



- ANSWER

- WORKING

ANSWER

 $\mathcal{L}$

8. To donate blood you must:

- be aged 17 or over
- weigh more than 8 stones
- wait at least 16 weeks since your last donation.

DONATE BLOOD

**Give your
blood and
save a life**



	Age	Weight (stones)	Weeks since last donation
John	24	10	14
Paul	32	12	20
Anne	45	7	35
Steven	19	11	17

Which **two** people could **not** donate blood?

Give the reason why each person could not donate blood.

NAME		REASON	
NAME		REASON	

4

KU	RE

- How much will Anna pay for her tiles?



ANSWER	£
--------	---

4

[illegible]

-
- A pie chart illustrating the distribution of costs for a product. The chart is divided into four segments: Production (61%), Management (20%), Sales (14%), and Catering (5%). The segments are labeled with their respective categories and percentages.
- | Category | Percentage |
|------------|------------|
| Production | 61% |
| Management | 20% |
| Sales | 14% |
| Catering | 5% |

WORKING	
ANSWER	%

3

WORKING	
ANSWER	people

3

11. Donald weighs himself every month for 6 months.
The weights (in kilograms) are listed below.

83 81 78 80 78 77

Calculate Donald’s mean weight over the 6 months.

WORKING	
ANSWER	kilograms

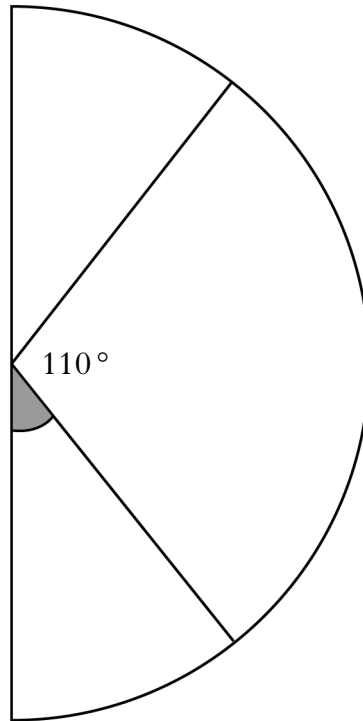
Marks	KU	RE
4		

Marks

KU	
----	--

RE

- 12.** Kitchen Display has designed a glass sign to place outside its shop. The design is based on the letters K and D as shown below.



The design has **one** large piece of glass and **two identical** smaller pieces of glass.

Calculate the size of the shaded angle.

WORKING

ANSWER

C

3

Marks

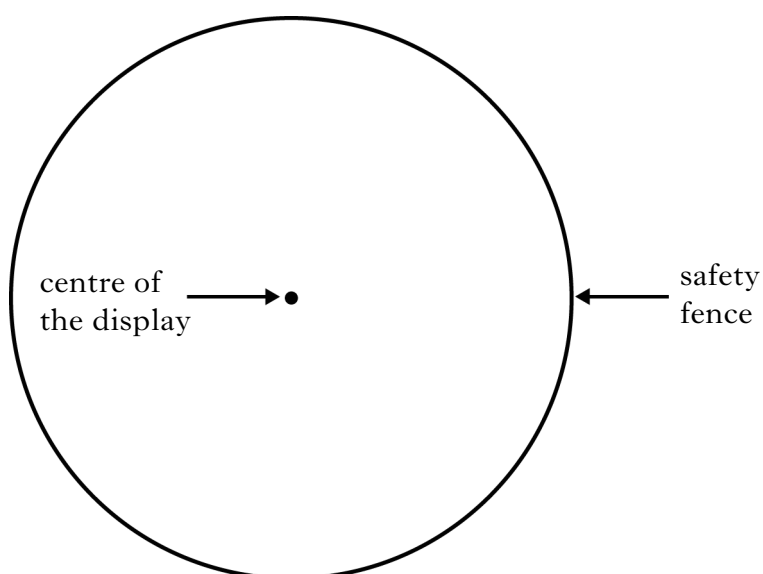
KU

RE

- 13.** A firework display is being prepared.



For safety, a circular fence is erected as shown on the plan below.



- (a) **On the plan**, measure the distance, in centimetres, from the centre of the display to the safety fence.

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

1

The scale of the plan is **1 centimetre represents 3 metres.**

- (b) Find the **actual** distance from the centre of the display to the safety fence.

WORKING	
ANSWER	metres

2

KU	RE

- Number of miles = 5 × Number of kilometres ÷ 8**

Calculate how many miles Jozef ran.

ANSWER

miles

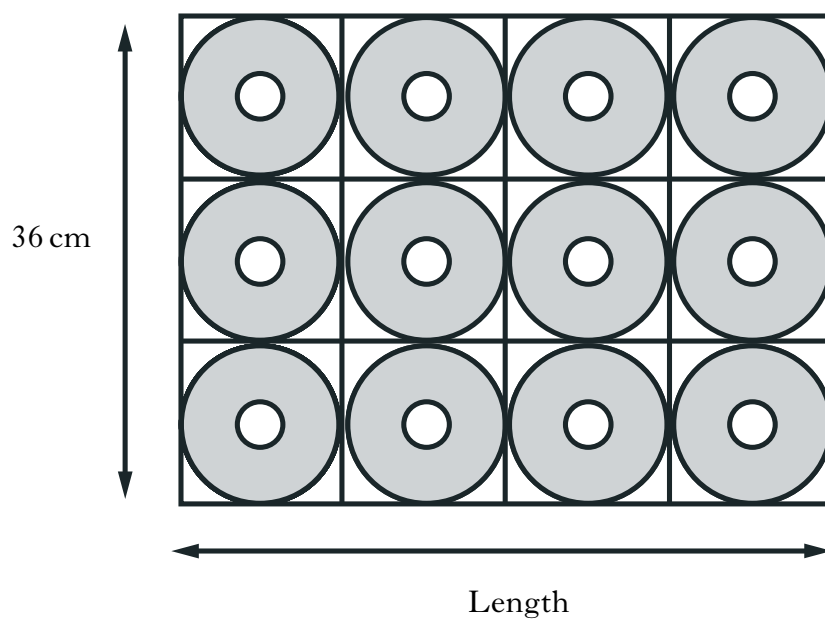
2

Marks

KU

RE

15. Samantha made a rectangular wall display using her favourite compact discs.



Each compact disc has a radius of 6 centimetres.

The breadth of the display is 36 centimetres.

Calculate the length of the display.

WORKING

ANSWER

centimetres

2

KU	RE

-
- A black and white line drawing of a woman walking from left to right. She is wearing a light-colored short-sleeved shirt, dark trousers, and sneakers. She has a ponytail and is carrying a shoulder bag. In her left hand, she holds a clipboard with a sheet of paper.

- 1 mile every day in March
- 2 miles every day in April
- 3 miles every day in May.

You must give a reason for your answer.

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[END OF QUESTION PAPER]

ADDITIONAL SPACE FOR ANSWERS

ADDITIONAL SPACE FOR ANSWERS

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