FOR OFFICIAL USE

F

KU	RE

Total Marks

2500/401

NATIONAL QUALIFICATIONS 2006

FRIDAY, 5 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.

LI 2500/401 6/40070

SCOTTISH QUALIFICATIONS AUTHORITY ©

	Marks	KU	RE
1. Work out the answers to the following.			
(*a*) 2315 + 478			
WORKING			
ANSWER	**1**		■
(*b*) £4·17 × 5			
WORKING			
ANSWER £	**1**		■
(*c*) 50% of 164 metres			
WORKING			
ANSWER metres	**2**		■

	Marks	KU	RE

2. Gillian and David had a meal in a café.
This is their bill.

Chicken salad	£4·50
Fish and chips	£4·75
Water	£0·70
Tea	£0·85
TOTAL	£ ·

(*a*) Work out the total bill.

WORKING	
ANSWER	£

1

(*b*) Walter also had a meal in the café.
This is his bill.
The corner has been torn off.

Salmon salad	
Ice cream and fruit	£1·75
Coffee	£0·90
TOTAL	£6·95

Work out the cost of the salmon salad.

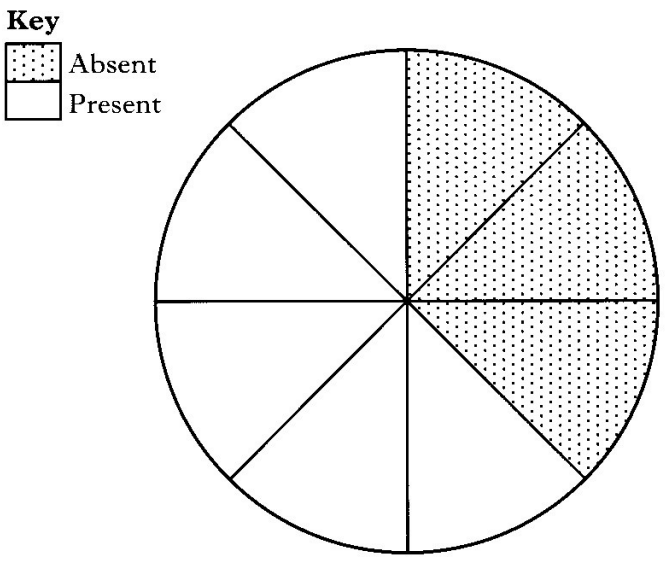
WORKING	
ANSWER	£

3

	Marks	KU	RE

3. The pie chart below shows the attendance of a class one Monday.

Class Attendance



(*a*) What fraction of the class is absent?

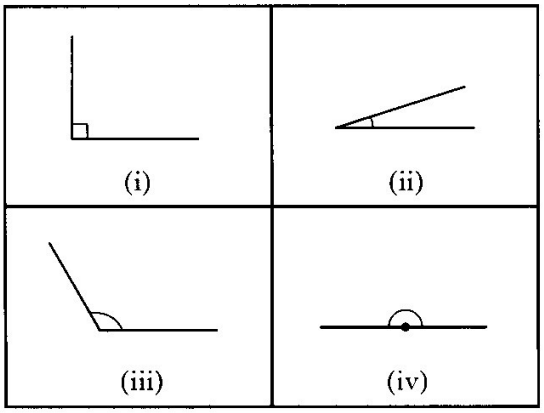
ANSWER		1		■

(*b*) There are 32 pupils on the class register.
How many pupils are absent?

WORKING				
ANSWER	pupils	3	■	

	Marks	KU	RE

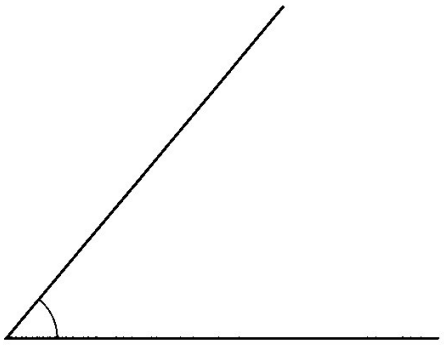
4. (*a*) There are four angles shown in the boxes below.



Which one is an acute angle?

ANSWER	The acute angle is in box ( ).	**1**		■

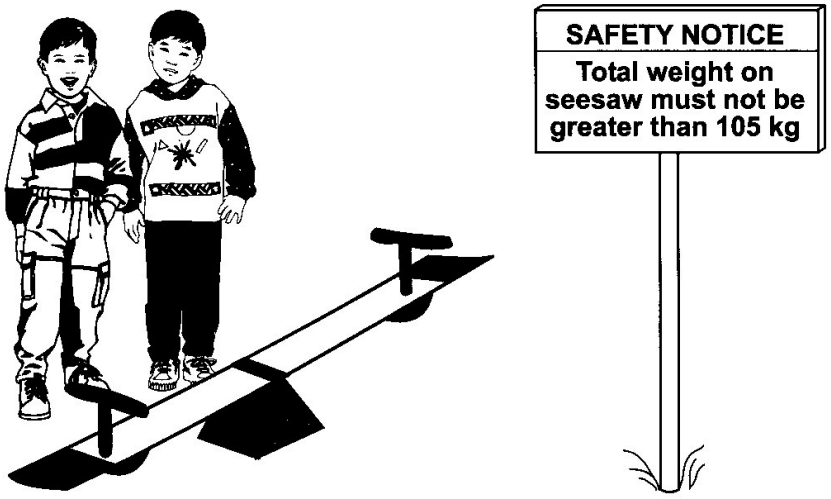
(*b*) Use a protractor to measure the angle below.



ANSWER	°	**1**		■

	Marks	KU	RE

5. Brian and his brother go to the local park.



Brian weighs 48 kilograms and his brother weighs 54 kilograms.

Can Brian and his brother play safely together on the seesaw?

You must give a reason for your answer.

WORKING

ANSWER INCLUDING REASON

2

	Marks	KU	RE

6. The circus is coming to town.

(*a*) For how many days is the circus open?

WORKING			
ANSWER	days	2	

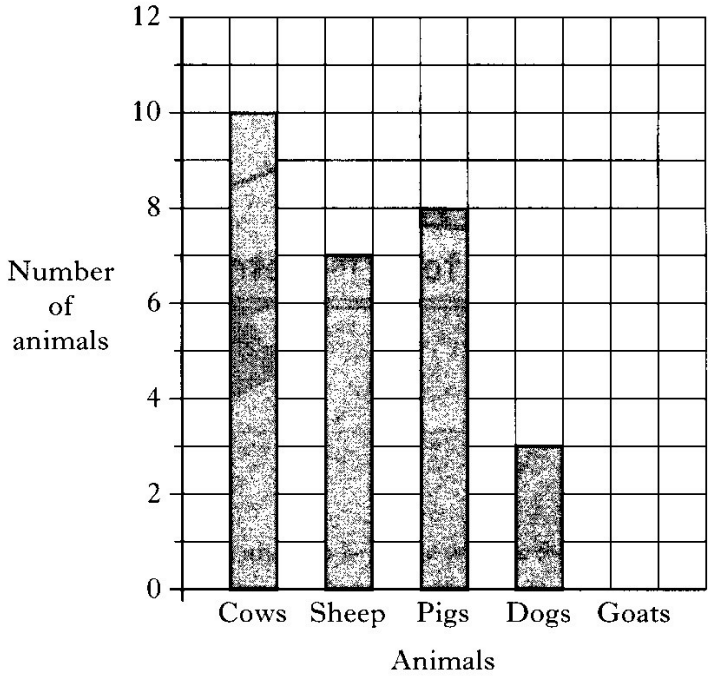
(*b*) The circus is so popular that it stays in town for a further 10 days. On what date will the circus now finish?

WORKING			
ANSWER	Finish Date	2	

	Marks	KU	RE

7. Farmer Jack Shearer is drawing a graph to show how many animals he has on his small farm.

Part of the graph is shown below.



(*a*) How many sheep are there on the farm?

ANSWER		sheep

1

(*b*) The **total** number of animals on the farm is 34.

Complete the graph to show the number of goats.

WORKING

3

[END OF QUESTION PAPER]

FOR OFFICIAL USE

F

KU	RE

Total Marks

2500/402

NATIONAL QUALIFICATIONS 2006

FRIDAY, 5 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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LI 2500/402 6/40070

SCOTTISH QUALIFICATIONS AUTHORITY ©

	Marks	KU	RE

1. Mr and Mrs Smith and their two children, aged 14 and 10, are planning a ski holiday.

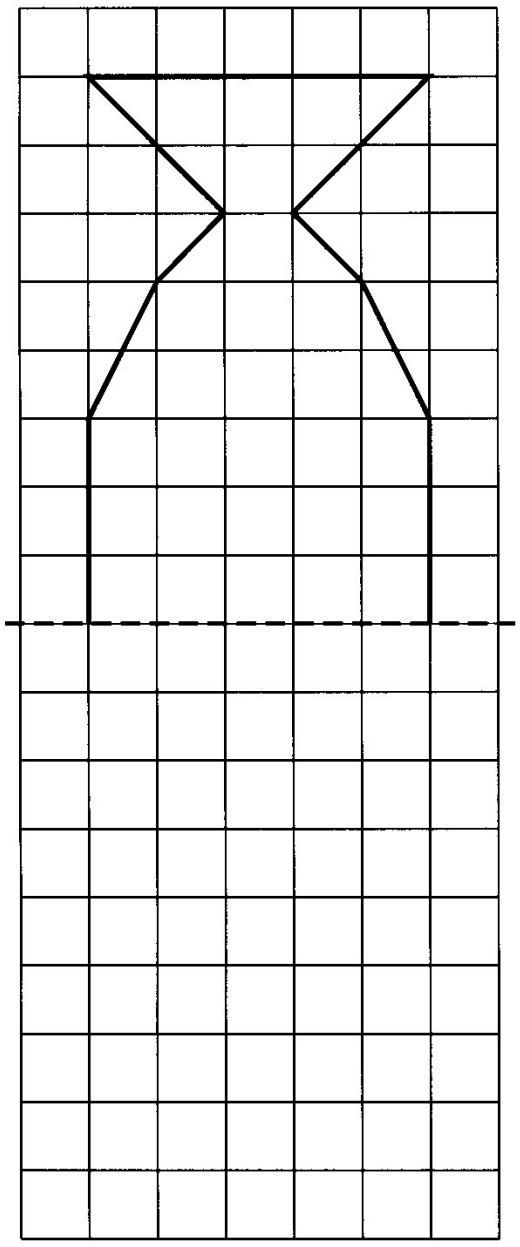
This table shows the prices.

	Cost per person
Adult	£950
Child : over 12	£625
Child : 12 or under	£375

Work out the total cost of their holiday.

WORKING	
ANSWER	£

3

		Marks	KU	RE
2.	The broken line is an axis of symmetry. Complete the diagram. 	**4**		

	Marks	KU	RE

3. Ian belongs to a running club.

(*a*) One evening he starts running at 1830 hours and finishes at 2100 hours.

For how long did Ian run?

WORKING			
ANSWER	hours	minutes	**1**

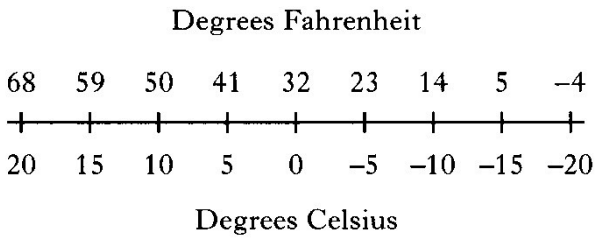
(*b*) He runs at an average speed of 6 miles per hour.

What distance did Ian run?

WORKING		
ANSWER	miles	**2**

	Marks	KU	RE

4. The scale below shows temperatures in both degrees Fahrenheit and degrees Celsius.



(*a*) Use the scale to change 5 ° Fahrenheit into degrees Celsius.

ANSWER	° Celsius	**1**		■

(*b*) The temperature falls from 10 ° Celsius to −5 ° Celsius.

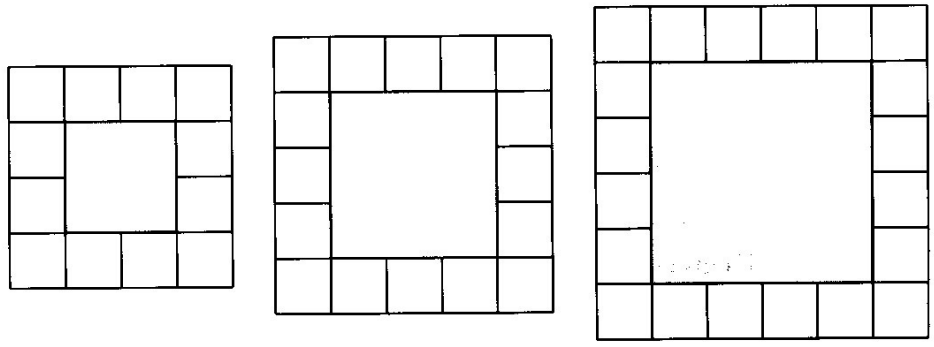
Work out by how many degrees **Fahrenheit** the temperature falls.

WORKING				
ANSWER	° Fahrenheit	**3**	■	

Marks | KU | RE

5. A picture frame company makes square frames in different sizes.

Each frame has tiles round the edge as shown.



Size 1 Size 2 Size 3

(*a*) Complete this table.

Size number	1	2	3	4	5	6		10
Number of tiles	12	16						

WORKING

4

(*b*) Write down a rule for finding the number of tiles if you know the size number.

RULE

2

	Marks	KU	RE

6. Brad has 10 goldfish.

The weight, in grams, of each goldfish is listed below.

58 64 66 67 70 73 73 74 83 92

(*a*) Write down the mode.

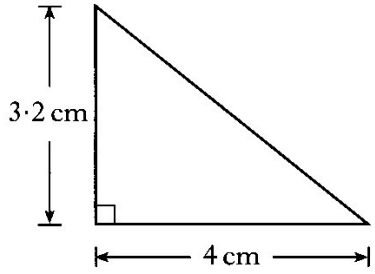
ANSWER	grams	1		

(*b*) Calculate the mean weight of a goldfish.

WORKING				
ANSWER	grams	4		

	Marks	KU	RE

7. Calculate the area of the triangle shown below.



WORKING			
ANSWER	square centimetres	3	

	Marks	KU	RE

8. A bottle of wine contains 750 millilitres.

(*a*) Six glasses can be filled from one bottle of wine.

How much wine does each glass contain?

WORKING	
ANSWER	millilitres

2

(*b*) A catering company is organising a dinner party for 12 people.

Each person will be served with 2 glasses of wine.

How many bottles of the wine will be needed?

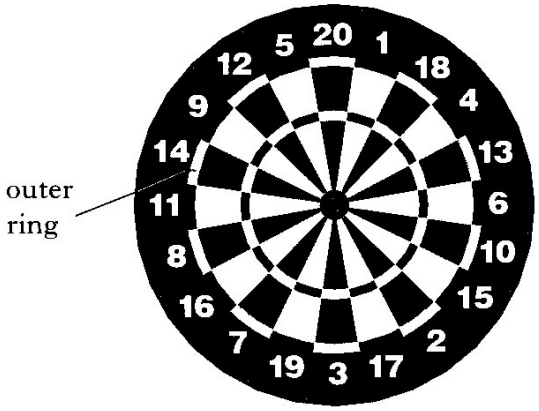
WORKING	
ANSWER	bottles

2

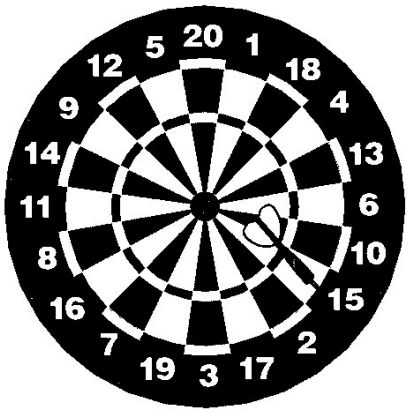
	Marks	KU	RE

9. The diagram below shows a dartboard.

When a dart lands in the outer ring, you score **double** points.



For example, the dart shown below has landed in **double 15**, giving a score of **30** points.



Marks | KU | RE

9. (continued)

Irene is playing a game of darts.

To win the game using her last **2 darts**, Irene needs to

- score a total of **19** points
- throw a **double** with her second dart.

The table below shows two ways that Irene can win.

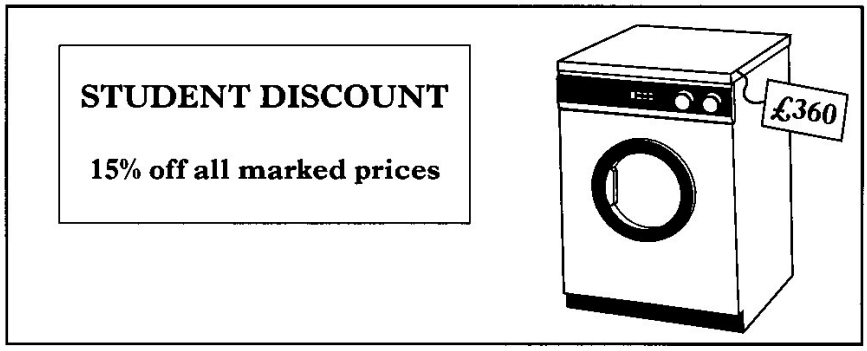
First dart	Second dart	Total	
1	double 9	19	1 + 18 = 19
7	double 6	19	7 + 12 = 19
	double	19	
	double	19	
	double	19	
	double	19	
	double	19	

Complete the table to show five other ways that Irene can win. **3**

WORKING

	Marks	KU	RE

10. A shop offers students a 15% discount off all marked prices.



How much would a student pay for a washing machine with a marked price of £360?

WORKING	
ANSWER	£

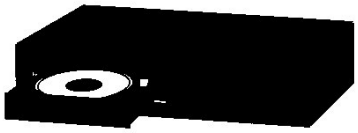
4

	Marks	KU	RE

11. Anne wants to buy a DVD recorder.

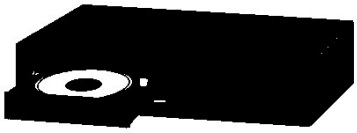
She sees the one she wants in two different shops.

Electrical Direct



Pay a deposit of £70 and then 24 monthly payments of £15·25

Roberts and Sons



Special Offer £399·99

(*a*) How much would it cost to buy the DVD recorder in Electrical Direct?

WORKING	
ANSWER	£

3

(*b*) Anne decides to buy the DVD recorder in Roberts and Sons.

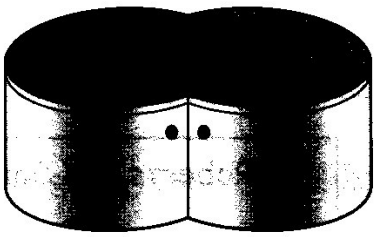
How much does she save by buying it in this shop?

WORKING	
ANSWER	£

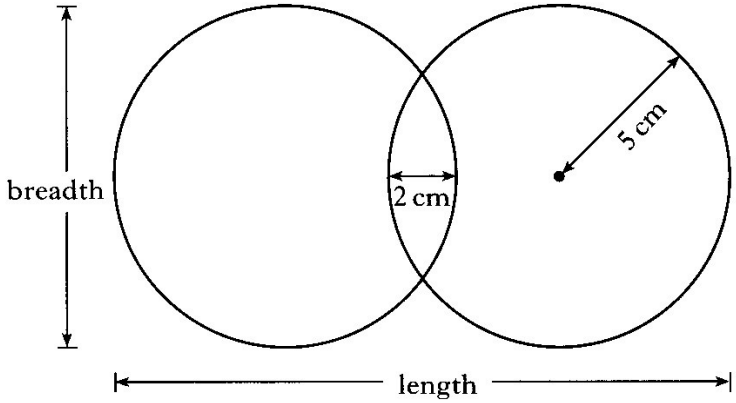
2

	Marks	KU	RE

12.



The top of a jewellery box is in the shape of two equal overlapping circles.
A sketch of the top of the box is shown below.



The radius of each circle is 5 centimetres.
The two circles overlap by 2 centimetres.

(*a*) Calculate the breadth of the jewellery box.

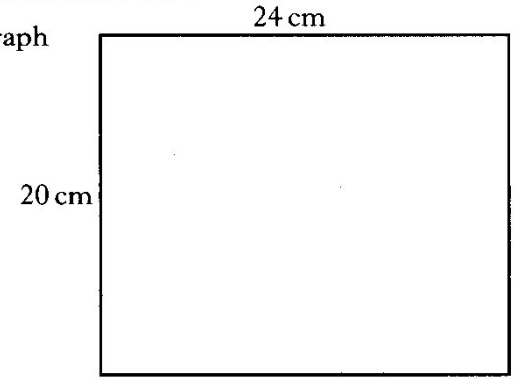
WORKING			
ANSWER	centimetres	1	

(*b*) Calculate the length of the jewellery box.

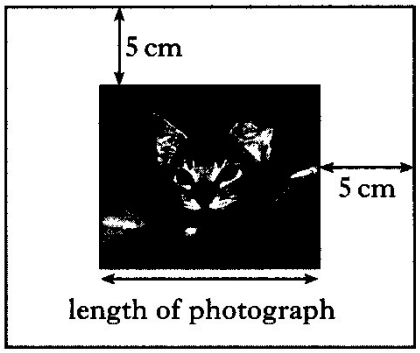
WORKING			
ANSWER	centimetres	3	

	Marks	KU	RE

13. Angela is going to place a photograph on this card.



She places it on the card so that there is a border of 5 centimetres all the way round.



(*a*) Find the length of the photograph.

WORKING	
ANSWER	centimetres

1

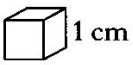
(*b*) Find the **perimeter** of the photograph.

WORKING	
ANSWER	centimetres

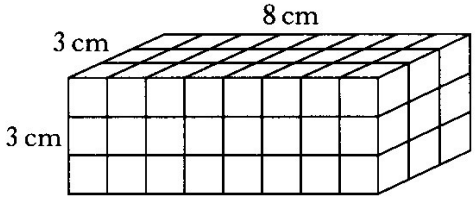
3

	Marks	KU	RE

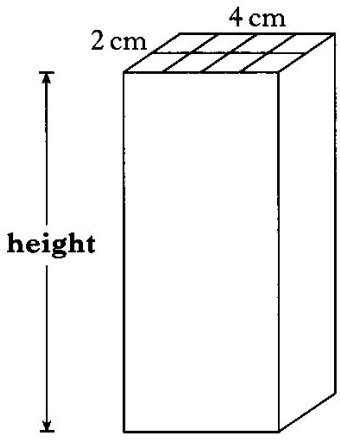
14. Bilal has a set of building cubes of side 1 centimetre.



He builds a cuboid 8 centimetres long, 3 centimetres broad and 3 centimetres high using **all** the cubes in the set.



Bilal then builds a different cuboid using **all** the cubes in the set.
It is 4 centimetres long and 2 centimetres broad, as shown below.



What is the height of this cuboid?

WORKING	
ANSWER	centimetres

4

[END OF QUESTION PAPER]