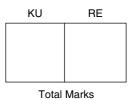
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NATIONAL QUALIFICATIONS 2007 THURSDAY, 3 MAY 9.00 AM - 9.20 AM MATHEMATICS STANDARD GRADE Foundation Level Paper 1 Non-calculator

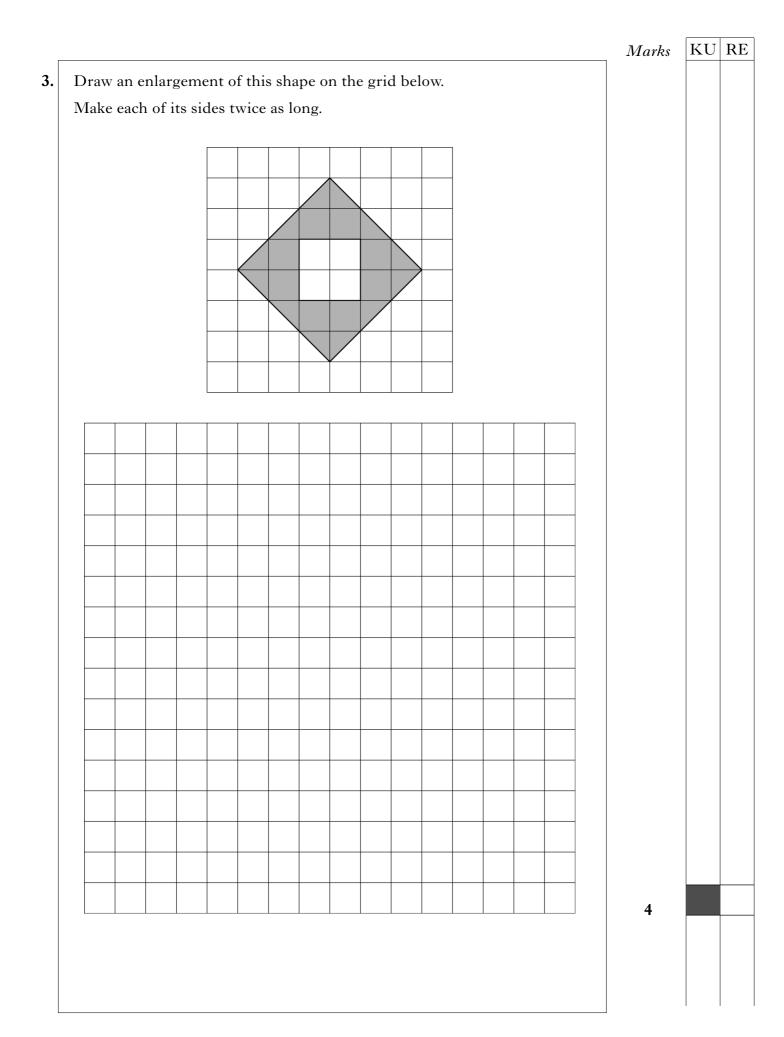
Fill in these boxes and read what is printed below.								
Full name of centre	Town							
Forename(s)	Surname							
Date of birth								
Day Month Year Scottish candidate number	Number of seat							
1 You may <u>NOT</u> use a calculator.								
2 Answer as many questions as you can.								
3 Write your working and answers in the spaces pro the end of this question-answer book for use if r clearly the number of the question involved.	· · ·							
4 Full credit will be given only where the solution con-	tains appropriate working.							
5 Before leaving the examination room you must giv not, you may lose all the marks for this paper.	e this book to the invigilator. If you do							

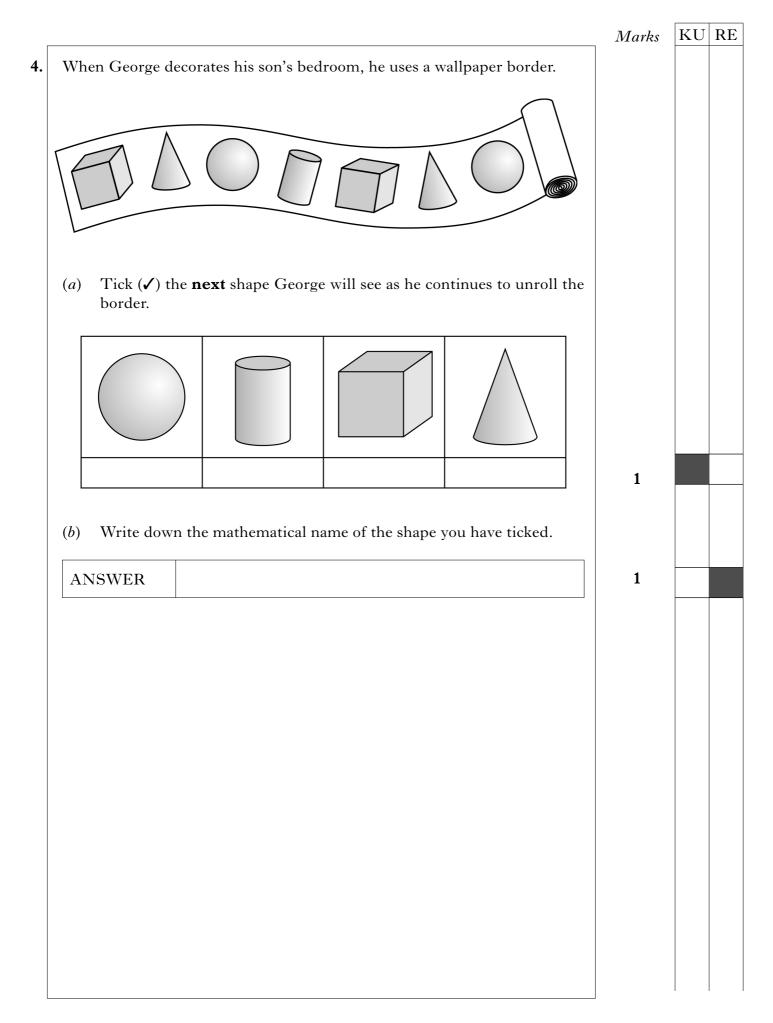




		Marks	KU	
Work out the answers to the following.				
(a) $1375 + 462$				
WODKING				
WORKING				
		_		
ANSWER		1		
$(b) 5 \cdot 23 \times 4$				
WORKING				
ANSWER		1		
() 1 (10)				
(c) $\frac{1}{8}$ of 120 metres				
WORKING				
ANSWER	metres	2		
I				ſ

	Marks	KU	RE
Closing Down Sale 20% Off All Marked Prices			
Fred bought a bicycle in this sale. The marked price was f_{a} 150. How much money was taken off the marked price?			
WORKING			
ANSWER £	2		





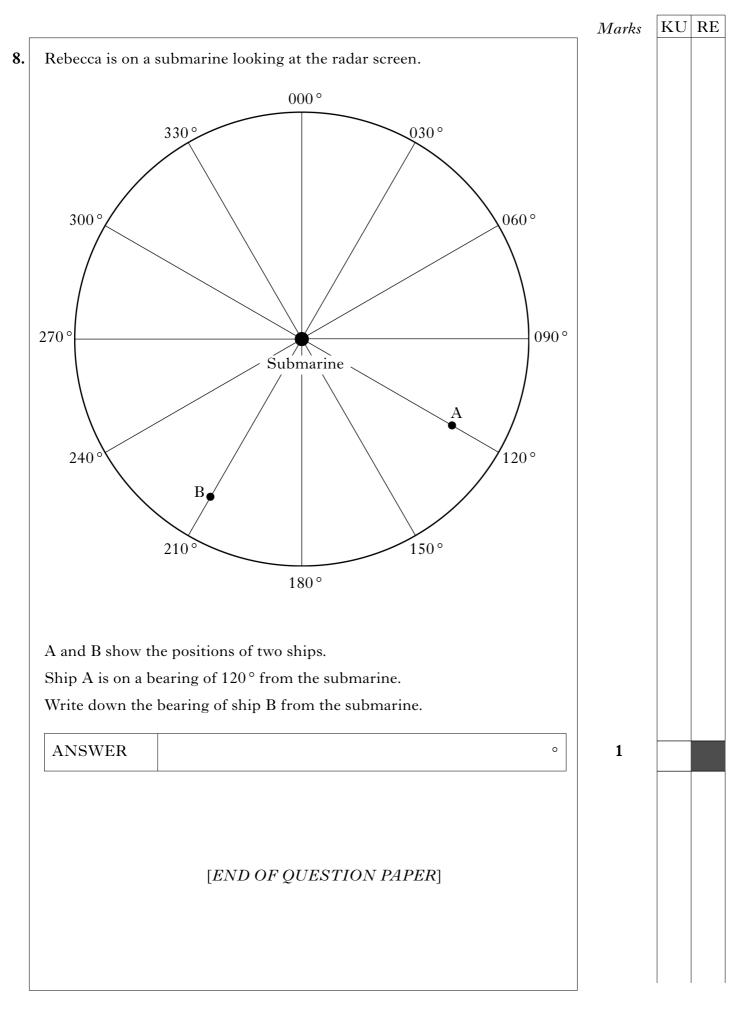
Marks	1
WATRS	

			Marks	KU
1 litre of fuel. She is planning a	n travel 20 kilometres on a journey of 140 kilometres. s of fuel will Sheila need for			
WORKING				
ANSWER		litres	2	

Douling is aires	a film on DVD for her birthdor	Marks	KU
	n a film on DVD for her birthday.		
The film has a	running time of 135 minutes.		
	o watch the film at 7.50 pm. vatch the television programme, Football Highlights, which om.		
	n ends, how long will it be until the start of Football		
Highlights?			
WORKING			
ANSWER	minutes	4	

			Marks	K
This map shows Phone Transmitt		ol, a Bus Station and a M	lobile	
		Bus Station	ı	
50	chool			
		•		
		Mobile Phone Transmitt	er	
()] #				
(a) Measure th map .	ne distance from the Sch	nool to the Bus Station or	h the	
[
ANSWER(b) The scale of	f the map is 1 centimetr	centime e represents 100 metres.	etres 1	
(b) The scale of Find the act	f the map is 1 centimetr tual distance from the Scl	e represents 100 metres.	etres 1	
(b) The scale of		e represents 100 metres.	etres 1	
(b) The scale of Find the act		e represents 100 metres.	etres 1	
(b) The scale of Find the act		e represents 100 metres.	etres 1	
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(b) The scale of Find the act		e represents 100 metres.	etres 1	
(b) The scale of Find the act WORKING		e represents 100 metres.		
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(b) The scale of Find the act WORKING		e represents 100 metres.		
(b) The scale of Find the act WORKING		e represents 100 metres.		
(b) The scale of Find the act WORKING		e represents 100 metres.		

	Marks	
(continued)		
(c) New safety regulations state that mobile phone transmitters should be more than 1 kilometre from any school.		
Is the Mobile Phone Transmitter shown on the map a safe distance from the School?		
You must give a reason for your answer.		
WORKING		
ANSWER INCLUDING REASON		
	3	



ADDITIONAL SPACE FOR ANSWERS

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FOR OFFICIAL US	E			

KU	RE			
Total Marks				

2500/402

NATIONAL QUALIFICATIONS 2007 THURSDAY, 3 MAY 9.40 AM - 10.20 AM MATHEMATICS STANDARD GRADE Foundation Level Paper 2

SCOTTISH

AUTHORITY ©

QUALIFICATIONS

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.								
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 cor	tains 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.								



	Marks	KU	R
A ball hits the edge of a snooker table at an angle of 32° and rebounds from the edge at the same angle.			
Q			
<u>32°</u> <u>32°</u>			
Calculate the size of the shaded angle.			
WORKING			
ANSWER °	2		

Marks KU RE

2. Mrs Wong is choosing a new car.

The Colour	can be	Black	or	Red
The Style	can be	Saloon	or	Hatchback
The Engine Type	can be	Petrol	or	Diesel

The table below shows one possible combination.

Colour	Style	Engine Type
Black	Hatchback	Diesel

Complete the table to show five other possible combinations.

3

			Marks	KU
The final scores	in the Masters Golf Ch	ampionship are shown below	ν.	
	Howard Barclay	-1		
	Alan Palmer	+2		
	Ben Logan	-3		
	Scott Adam Norman Greig	+5 -2		
	Norman Greig	-2		
The player with	the lowest score wins t	he championship.		
Who won?				
ANSWER			1	

Marks

KU RE

4.	Here is part of a train timetable.
----	------------------------------------

	Train 1	Train 2	Train 3
Lanark	09 52	10 22	10 52
Carluke	10 02	10 32	11 02
Wishaw	10 08	10 38	11 08
Motherwell	10 20	10 50	11 20
Glasgow	10 55	11 20	11 55

(a) Amanda takes the 09 52 train from Lanark to Glasgow.When will she arrive in Glasgow?

ANSWER

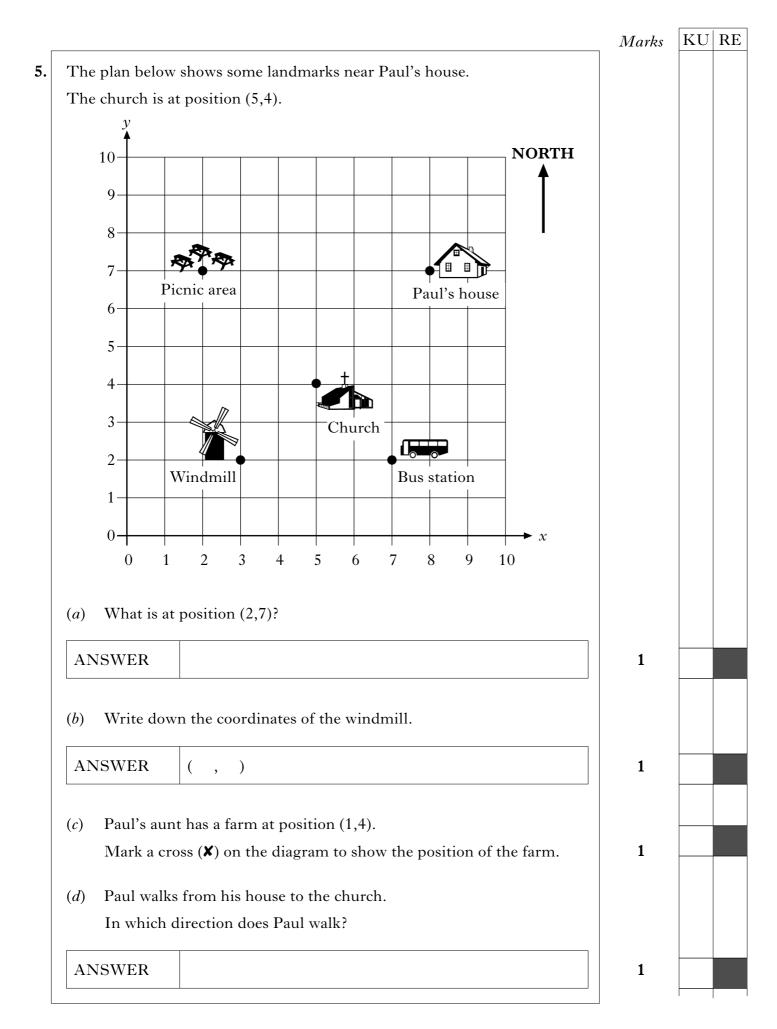
(b) Amanda's friend Lewis boards a later train at Wishaw.This train arrives in Glasgow at 11 55.

How long does his journey from Wishaw to Glasgow take?

WORKING	
ANSWER	minutes

3

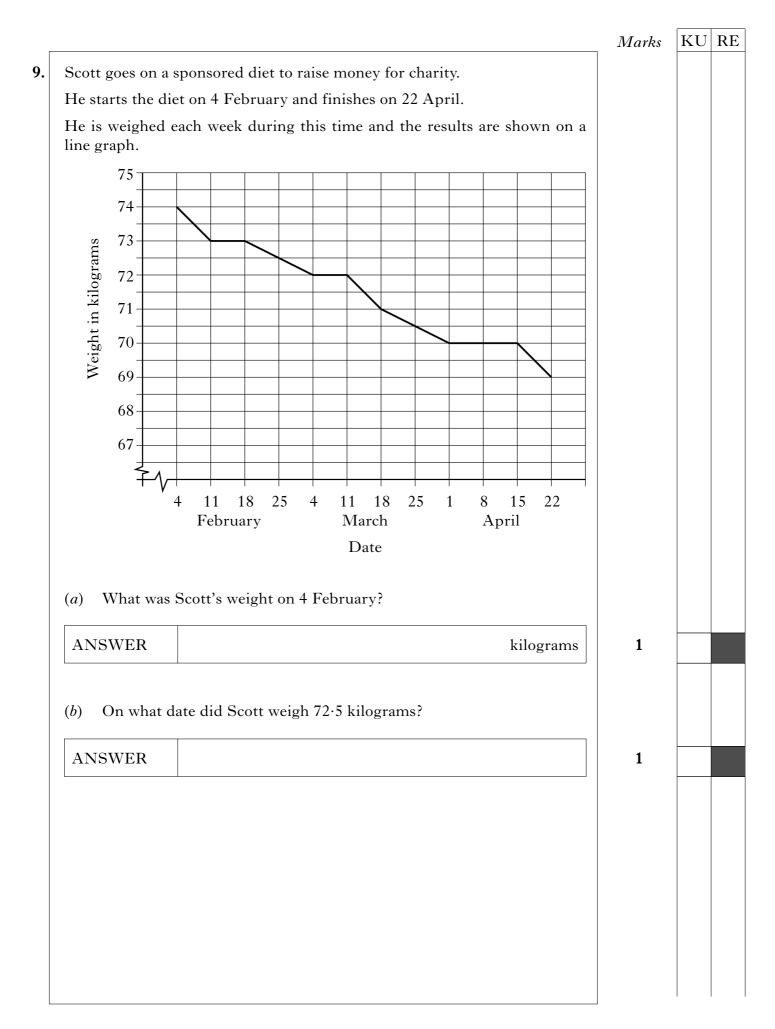
1



										Marks	KU	I
In a	restaurant, tables and chair	s are	set ou	it as s	hown	belo	W.					
									D			
	1 table 2 t	tables	6			3	table	S				
(<i>a</i>)	Complete this table.											
	Number of tables	1	2	3	4	5	6		13			
	Number of chairs	4	6									
WC	ORKING											
	1											
										4		
					G							
(<i>b</i>)	Write down a rule for fin number of tables.	ding	the n	umbe	r of c	hairs	if yo	u kno	w the			
RU	LE											
										2		

					1	
Name of Em	ployee: RAC	CHEL BROWN	N			
Payments	Basic pay £180∙00	Overtime £28.00	Bonus £,20∙00	A Gross Pay £		
Deductions	National Insurance £14.50	Income Tax £36.00	Union Dues	B Total Deductions		
				C Net Pay £. ·		
Complete Rach	nel's payslip by	y filling in boxe	es A , B and C .			
					3	
					3	
					3	
					3	
					3	

		ng firm pays its employ	ees a bonus each m	onth based on		
heir sale: The table		v shows how the bonus i	s calculated.			
		Sales	Bonus			
	Less	than £10000	£0			
	From	n £10 000 to £20 000	6% of sales			
	Mor	e than £20000	12% of sales			
		h John sells £5000 wort is bonus?	h of double glazing.			
ANSW	ER	£			1	
	culate	month Martha sells £16 her bonus.	5000 worth of double	glazing.		
Cal	culate		5000 worth of double	glazing.		
Cal	culate		5000 worth of double	glazing.	3	



		Marks	KU	ŀ
(continued)				
(c) Scott is sp 4 February	ponsored $\pounds 30$ for every kilogram of weight lost between y and 22 April.			
	n money did he raise for charity?			
WORKING				
ANSWER	£			
	~	4		

-

Marks KU RE

1

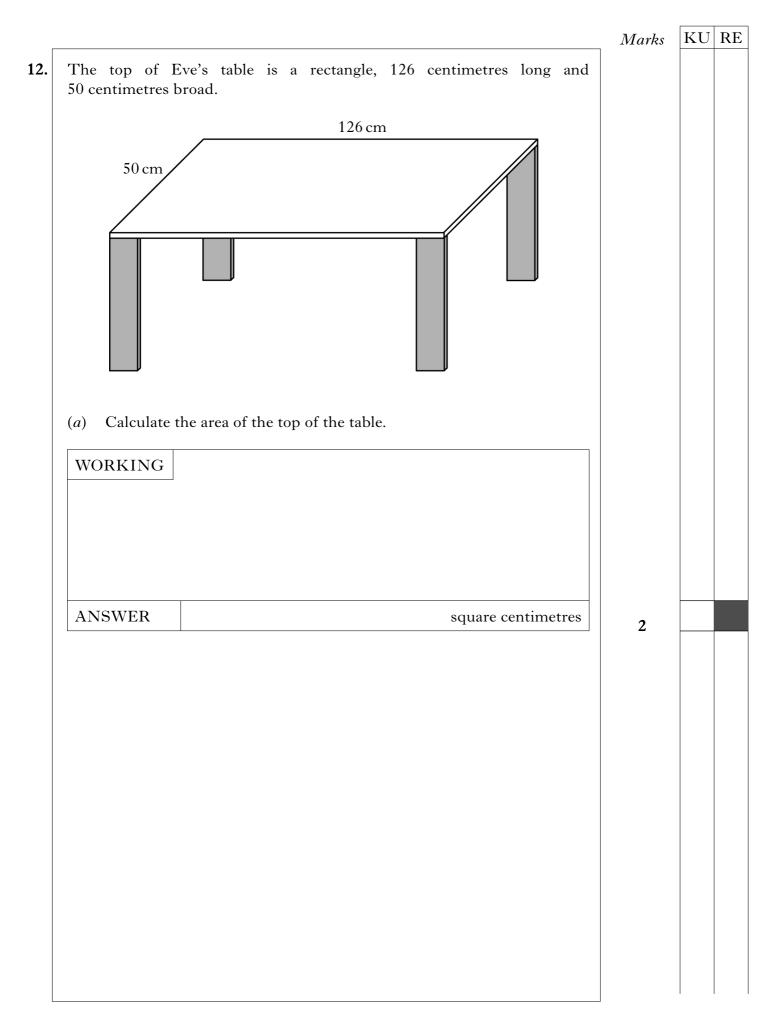
10. The marks of a group of pupils in their French test are shown in the frequency table below.

Mark	Frequency
12	4
13	6
14	9
15	11
16	19
17	8
18	3

Which mark is the mode?

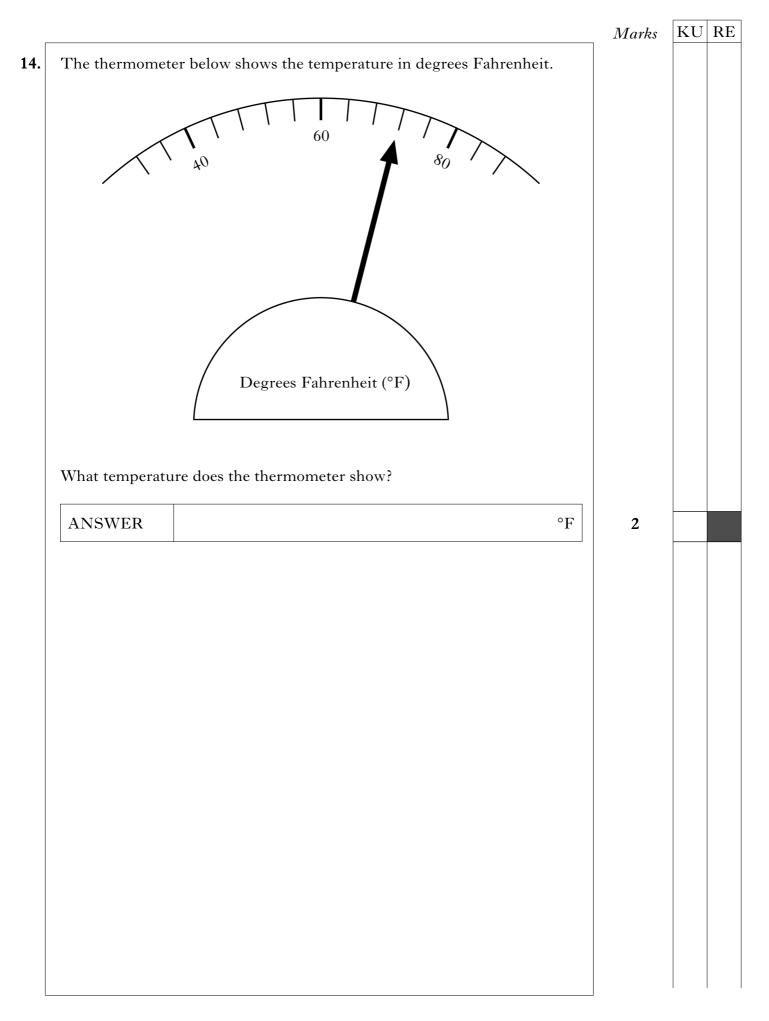
ANSWER	
--------	--

KU RE Marks 11. **ATLETICO LEISURE CENTRE Ticket Price** Activity Aquatrim $f_{3} \cdot 20$ Swim £4.65 Aerobics £3.25 Gym £,4·30 Sauna £,4·15 Ian buys a ticket for the gym. (a)How much does this cost him? ANSWER 1 £ Atletico Leisure Centre offers a special monthly ticket costing $\pounds 25$. *(b)* This special ticket allows you to use the activities as often as you wish for one month. Janet buys a special monthly ticket. She goes to Aerobics 10 times in that month. How much does Janet save? WORKING ANSWER £ 3



		Marks	KU	I
(conti	nued)			
(<i>b</i>) E	we decides to fit wooden strips onto the table top as shown below.	•		
E	ach strip measures 50 centimetres by 10.5 centimetres.			
50 cm	→ 50 cm			
10-	5 cm 126 cm			
	calculate the number of wooden strips needed to cover the top of able.	the		
WOR	KING			
ANS	WER wooden stri	ps 2		

children betwe	en the ages of two and twelve years.		
	Expected Height = 5 × Age in years + 80		
What age is a c	child whose expected height is 100 centimetres?		
WORKING			
	11	2	
ANSWER	years old	3	



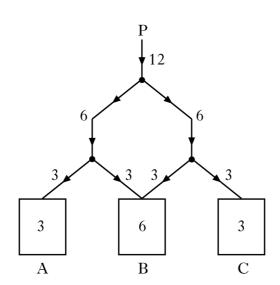
Marks



15. When sheep are taken by a shepherd to a junction, half of the sheep take one path and half the other.

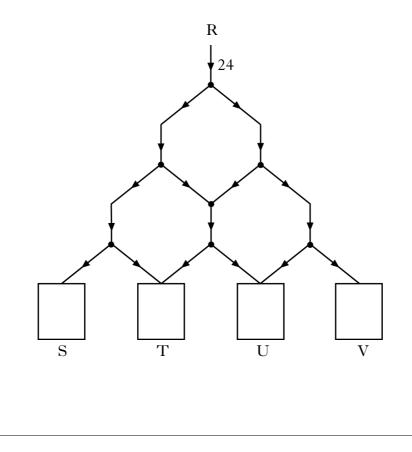
12 sheep start at point P.

The diagram below shows how many sheep then arrive in pens A, B and C.



24 sheep start at point R.

Show clearly **how** they separate at each junction **and** how many arrive in pens S, T, U and V.



3

Page eighteen

	Marks	KU
Ed makes a footstool. It is in the shape of a cuboid, 40 centimetres long, 30 centimetres broad and 35 centimetres high.		
30 cm 35 cm		
(<i>a</i>) Calculate the volume of Ed's footstool.		
WORKING		
ANSWER cubic centimetres	2	
(b) Ed fills the footstool with foam and then puts a decorative cord around all the edges. $30 \text{ cm} \qquad 40 $	2	
(b) Ed fills the footstool with foam and then puts a decorative cord around all the edges.	2	
(b) Ed fills the footstool with foam and then puts a decorative cord around all the edges. $30 \text{ cm} \qquad 40 $	2	

ADDITIONAL SPACE FOR ANSWERS