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F

	KU	RE
Paper 1		
Paper 2		
Total		

2500/27/01

NATIONAL QUALIFICATIONS 2012

WEDNESDAY, 2 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.

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SQA ©

	Marks	KU	RE
1. Work out the answers to the following.			
(*a*) 95 – 37			
WORKING			
ANSWER	**1**		
(*b*) 29·61 ÷ 7			
WORKING			
ANSWER	**1**		
(*c*) 25% of £120			
WORKING			
ANSWER £	**2**		

	Marks	KU	RE

2. Anne is buying a house.

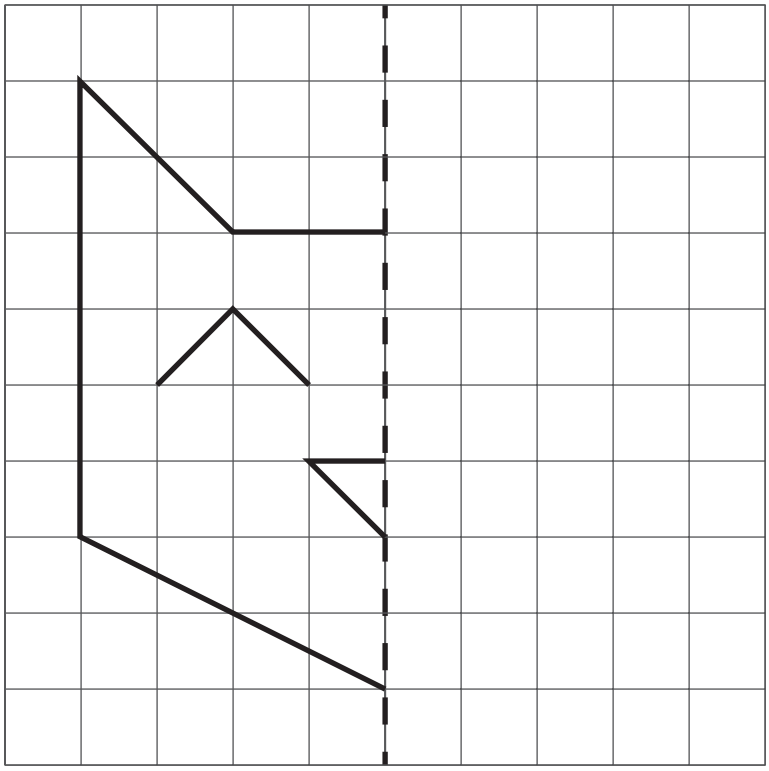
She has to pay the fees shown below.

- Surveyor's fee £130
- Administration fee £450
- Lawyer's fee £550

Calculate the total fees Anne has to pay.

WORKING	
ANSWER	£

2

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

	Marks	KU	RE

4. A jug contains 1250 millilitres of coffee.

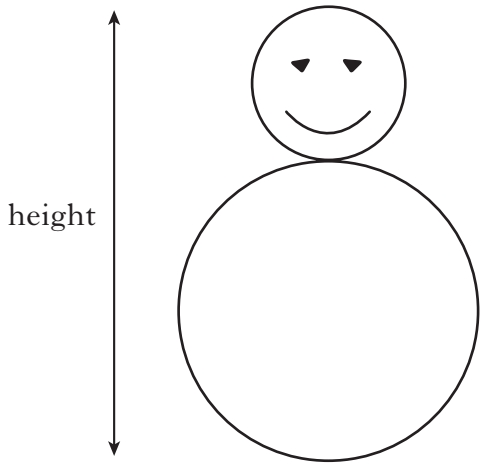
Marie pours one fifth of the coffee into her cup.

How many millilitres of coffee will be in her cup?

WORKING	
ANSWER	millilitres

2

	Marks	KU	RE
5. Two circles are drawn to make a snowman as shown below.			



The **diameter** of the body is 12 centimetres.

The **radius** of the head is 3 centimetres.

Calculate the height of the snowman.

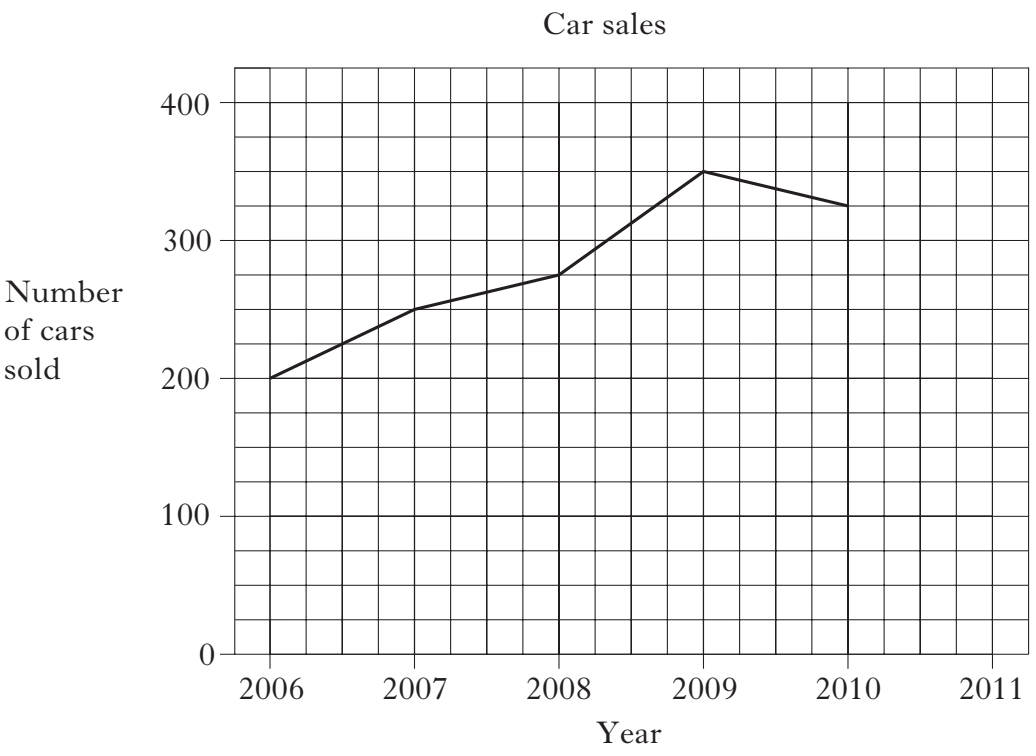
WORKING	
ANSWER	centimetres

3

	Marks	KU	RE
6. Jed arrived home from school at 3.45 pm.			
(*a*) Write 3.45 pm as a **24 hour time**.			
ANSWER	**1**		
(*b*) He started studying for his mathematics exam immediately. He studied for 85 minutes. When did he finish studying?			
WORKING			
ANSWER	**3**		

	Marks	KU	RE

7. The graph shows the number of cars sold by a garage each year from 2006 to 2010.



(*a*) How many cars were sold in 2007?

ANSWER	cars

1

(*b*) The number of cars sold in 2011 was double the number of cars sold in 2006.

Complete the graph to show the number of cars sold in 2011.

WORKING	

3

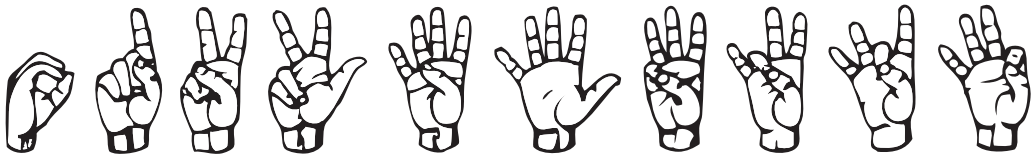
(*c*) Describe the trend of the graph.

ANSWER	

1

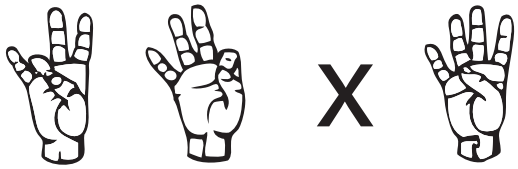
Marks	KU	RE

8. The hand signs for numbers in the American Sign Language are shown below.



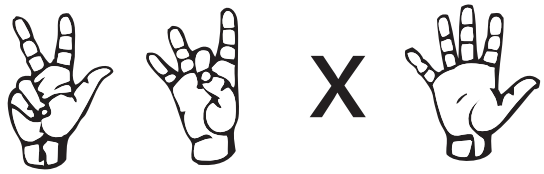
0 1 2 3 4 5 6 7 8 9

A teacher uses the hand signs below to get his class to work out 79 × 4.



WORKING	79 × 4 316
ANSWER	316

Write down the working and answer for the hand signs shown below.



WORKING	
ANSWER	

4

[*END OF QUESTION PAPER*]

ADDITIONAL SPACE FOR ANSWERS

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MATHEMATICS
STANDARD GRADE
Foundation Level
Paper 2

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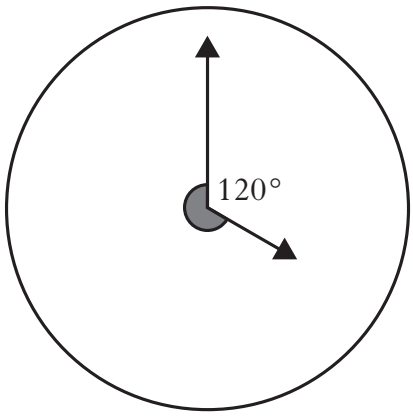
	Marks	KU	RE
1. Lorna can type 4 pages of text in 24 minutes. At the same rate, how many minutes will it take Lorna to type 7 pages?			
WORKING			
ANSWER minutes	**3**		

Marks

KU	RE

2. At 4 o'clock the hands of a clock make an angle of 120° as shown below.



Calculate the size of the shaded angle.

WORKING	
ANSWER	°

2

		Marks	KU	RE
3.	Here is a calendar for the month of November.			

Mon	Tue	Wed	Thu	Fri	Sat	Sun
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

(*a*) What day is November 15th?

ANSWER		**1**		

(*b*) What day is December 11th?

WORKING	
ANSWER	

2

	Marks	KU	RE
4. Frank did a sponsored walk to raise money for charity. He was sponsored for £9 per mile. He walked 16 miles. How much money did Frank raise for charity?			
WORKING			
ANSWER £	**2**		

	Marks	KU	RE
5. (*a*) Write the number **6735** in words.			
ANSWER	**1**		
(*b*) The numbers listed can be placed into the grid as shown.			

Numbers

56
74
217
736
1732

1	7	3	2	
	3		1	
5	6		7	4

Place the numbers listed below into the grid shown.

Numbers

58
63
321
571
5161

3

You may use the spare grids.

	Marks	KU	RE

6. The population of Glasgow is 580 000.

5% of the population are children below school age.

Calculate how many children are below school age.

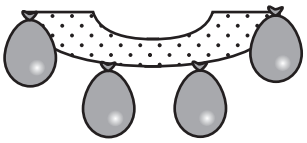
WORKING	
ANSWER	children

2

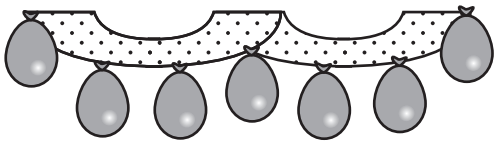
	Marks	KU	RE

7. The Party Company uses balloons to make decorations in different sizes.

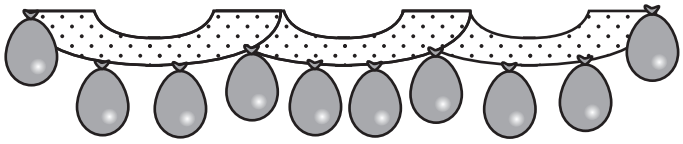
Some of the decoration sizes are shown below.



Decoration size 1



Decoration size 2



Decoration size 3

(*a*) Complete this table.

Decoration size	1	2	3	4	5	6		11
Number of balloons	4	7						

WORKING

4

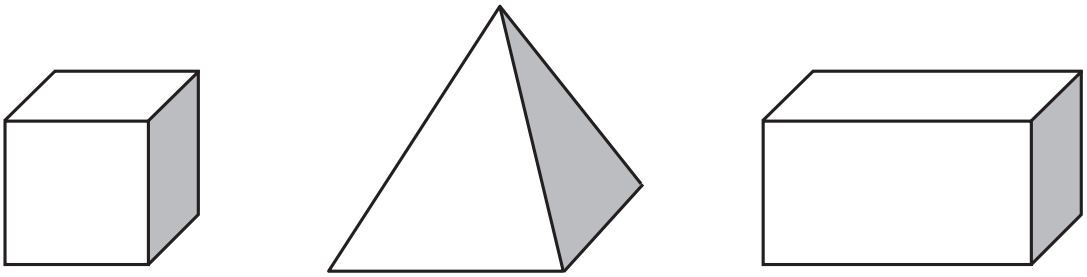
(*b*) Write down a rule for finding the number of balloons if you know the decoration size.

RULE

2

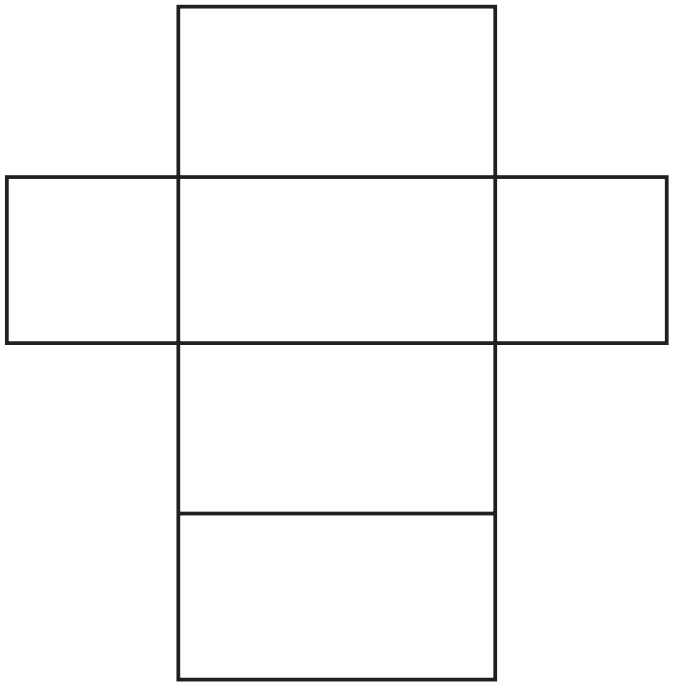
	Marks	KU	RE

8. Some 3D shapes are shown below.



Cube Pyramid Cuboid

This is the net for one of these 3D shapes.



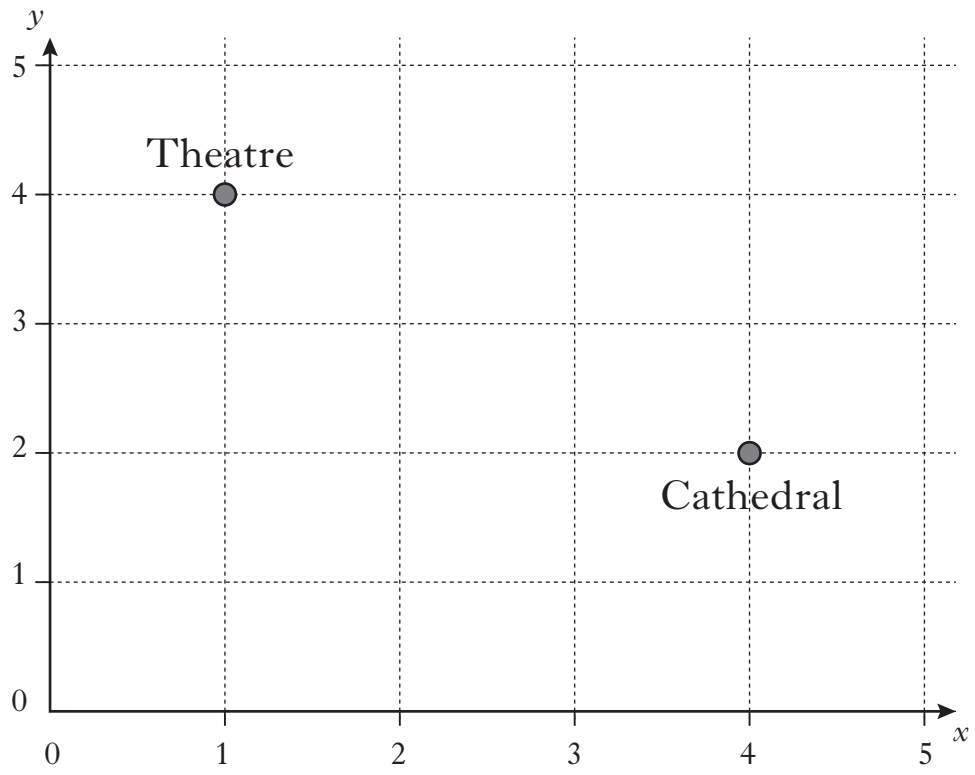
Which 3D shape has this net?

ANSWER		1		

	Marks	KU	RE

9. The plan below shows some landmarks in the town centre.

The theatre is at position (1, 4).



(*a*) Write down the position of the cathedral.

ANSWER	(,)

1

(*b*) The theatre and the cathedral are the **opposite** corners of a rectangle.

Mark two crosses on the grid to show the other two corners of the rectangle.

2

		Marks	KU	RE
10.	The same mobile phone is sold in five different shops for the prices shown below. £70 £77 £85 £93 £110 Calculate the mean price of the mobile phone. 			
	WORKING			
	ANSWER £	**4**		

		Marks	KU	RE
11.	When John started work, his company gave him an employee number. It was **08 / 367**. This indicated that he started as an employee in the year **2008** and he was the **367th** person employed by the company. When Sidra joined the company, she was given an employee number of **10 / 528**.			
	(*a*) In which year did Sidra join the company? ANSWER	**1**		
	(*b*) Peter was the next person employed by the company. He started one year after Sidra. What was Peter's employee number? WORKING ANSWER	**2**		

	Marks	KU	RE

12. The top of a table tennis table is in the shape of a rectangle.

The table has a breadth of 150 centimetres.

(*a*) Write the breadth in metres.

WORKING	
ANSWER	metres

2

(*b*) The table has a length of 2·7 metres.

Calculate the area of the top of the table in square metres.

WORKING	
ANSWER	square metres

2

Marks | KU | RE

13. Aileigh has the following coins in her purse.

One way of making a total of 30 pence **using the coins in her purse** is shown in the table below.

Complete the table to show 5 other ways that Aileigh can make a total of 30 pence **using the coins in her purse**.

1	0	2	0	0

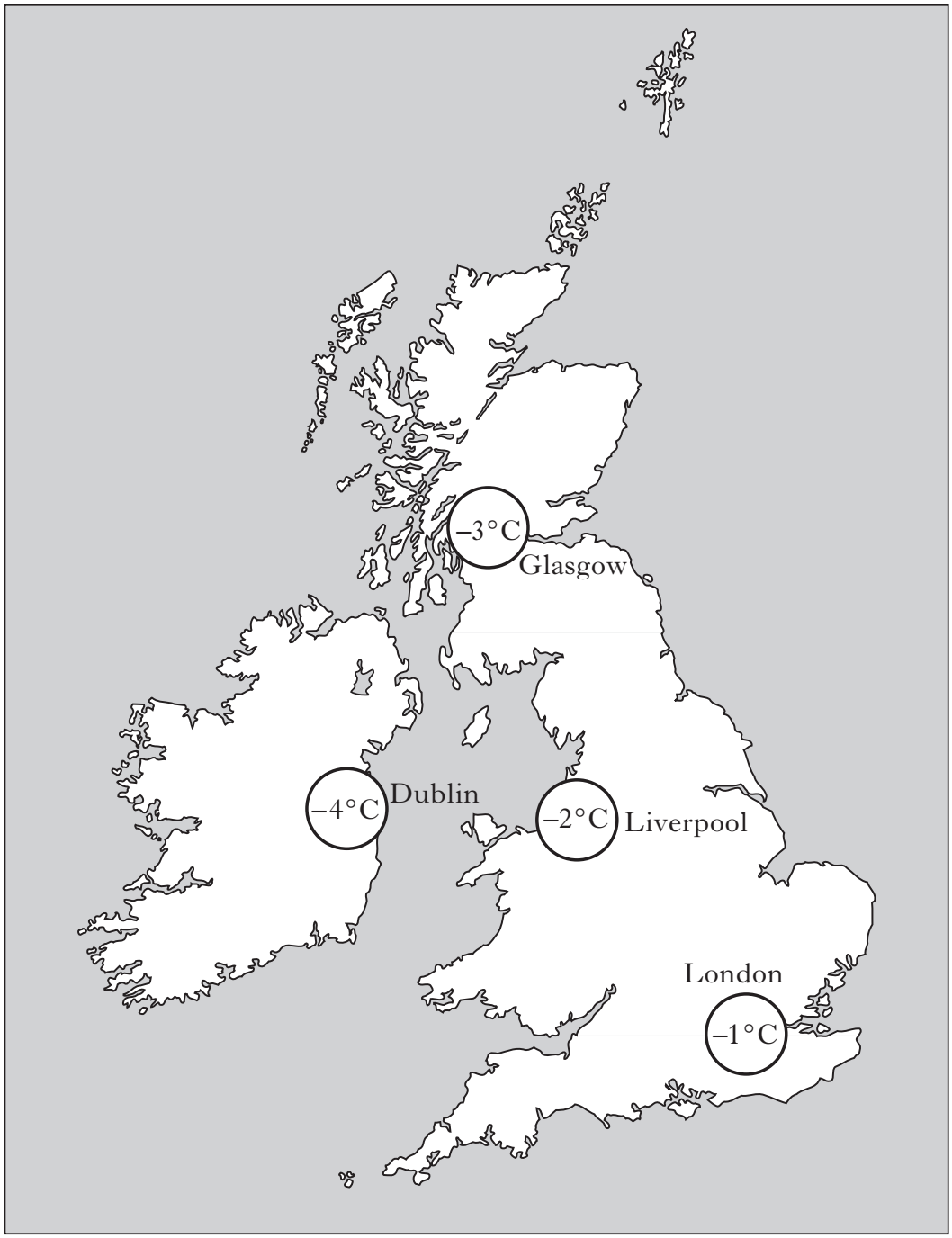
3

Marks

KU	RE

14. One December night, the temperatures in four cities were recorded.

The results are shown on the map below.



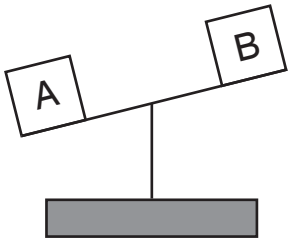
Which city was warmest?

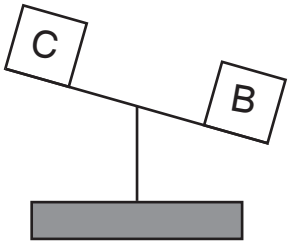
ANSWER	

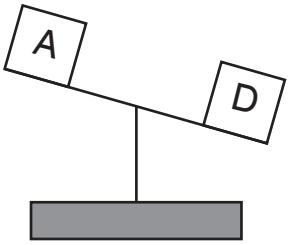
1

	Marks	KU	RE

15. Boxes labelled A, B, C and D are placed on the scales as shown.







The boxes are then placed in order from **lightest** to **heaviest**.

Label the boxes.

Lightest ⟶ **Heaviest**

WORKING

3

	Marks	KU	RE
16. The formula below is used to change measurements in inches to measurements in centimetres.			

Measurement in centimetres = 254 × Measurement in inches ÷ 100

Use the formula to change a measurement of 70 inches to centimetres.

WORKING	
ANSWER	centimetres

2

[Turn over for Question 17 on *Page eighteen*

	Marks	KU	RE

17. (*a*) A bookseller buys 200 books for £4·20 each.

How much did the books cost him altogether?

WORKING	
ANSWER	£

2

(*b*) He sells 120 of the books for £5·50 each and the remaining books for £3·50 each.

Did he make a profit or a loss?

You must give a reason for your answer.

WORKING	
ANSWER (WITH REASON)	

4

[*END OF QUESTION PAPER*]

ADDITIONAL SPACE FOR ANSWERS

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