na Cour	CIUN Zana ICOLO	•
A		Answer
1	587 – 1000 + 643 =	1056/230
2	24 ÷ (15 ÷ 3) =	<u>4r</u> 4
3	Write in digits $3.5 \times 10^5$ .	350000
4	Express $\frac{9}{25}$ as	
	a a decimal	<b>a</b> 0.36
	b a percentage.	<b>b</b> 36%
5	Reduce 90 by 15%.	76.5
6	0.3 ÷ 0.6 =	0.5
7	$\frac{5\times4}{2}$ is how many times $\frac{0.5\times0.4}{0.2}$ ?	
8	Approximate 0.0772 to	
	a 2 decimal places	<b>a</b> 0.08
	b the nearest thousandth.	<b>b</b> 0.077
9	Calculate 52 $\div$ 6 correct to two decimal places.	8.67
10	If $m = 6$ , $n = 5$ , evaluate $m^2 - n^2$ .	
11	$\frac{1}{2}(3+x)=4$ so x	= 5
12	√49 =	7.

12	V43 =		
(B		Answer	
1	I buy magazines costing £1.35, £2.20 and 85p. How much change from £5?		.60p
2	How many Euros for £500 at 1.25 Euros to £1?	€625	
3	16oz = 1lb. 5lb 6oz =		86oz
4	3lb 12oz + 4lb 8oz =	8lb	4oz
5	How many hours and minutes between 8.46 a.m. and 3.22 p.m.?	6h	36min
6	1m³ of olive oil has a mass of 920kg. What is the volume of 460g of oil?		500cm³
: <b>7</b>	A tank 0.75m tall has a square base with sides measuring 0.8m each. Find its volume.	0	.48cm³
8	A right-angled triangle with sides of 3cm, 4cm and 5cm is enlarged by the scale factor 3. What is the area of the new triangle?		54cm²

What is the order of

10 Approximate 165oz to the

nearest pound.

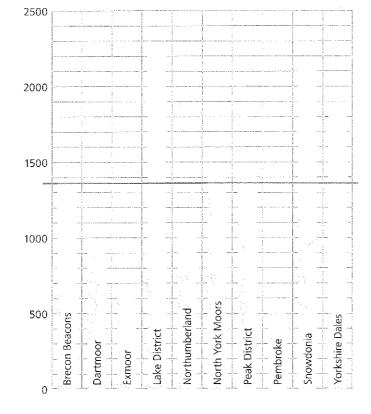
rotational symmetry of a square about its centre?

9

	THE STATE OF THE S	
		20.00

The graph shows the land area of ten National Parks.

## Area in sq km



1	Which is the smallest National Park?	Pembroke
2	Which is the largest National Park?	Lake District
3	Which park is approximately half the area of Northumberland?	Pembroke
4	The largest park is approximately how many times bigger than the	

5	Estimate the total area of all	
	ten parks (to the nearest 100km²).	13.600km²

6	Estimate the mean (average) area		
	of the ten parks.	-	1360km <sup>2</sup>

7	Draw a line on the graph to show
	the mean area of the parks.

smallest park?

8	Which park is nearest in area		
	to the mean?	 Brecon	Beacons

9	The Brecon Beacons is approximately	
	what percentage of the total area?	 10%

10	Which park is approximately 5%	
	of the total area?	Fymoor

11	Which park is approximately	
	one-eighth of the total area?	Yorkshire Dales

12	The Lake District is approximately		
	what fraction of the total area?	 	

Mental Arithmetic 6 Answers			
A		Answer	
1	221 ÷ 17 =		
2	$24 - (15 \times 3) =$	-Z	
3	Write in digits 2 <sup>4</sup> .	16	
4	The ratio of girls to boys is 7:3. If the are 28 girls how many boys are there		
5	Express 51 ÷ 8 as a mixed number.	. 6 <u>3</u>	
6	5.02 - 0.502 =	4,518	
7	$2\left(\frac{3.6+4.8}{6}\right) =$	2.8	
8	Approximate 0.00822 to		
	a 2 decimal places	a 0.01	
	b 1 decimal place.	<b>b</b> 0.0	

	·		
9	Estimate correct to the nearest whole number. (9.973 + 5.032) ÷ 2.986		
10	If $m = 6$ , $n = 5$ , evaluate $(m + n) \times (m - n)$ .	ř	

	•
12	Write the next two terms
	of the sequence.

 $11 \frac{3}{9} = \frac{1}{3}$ 

or the seque	ince.	
1, 3, 6, 10,	,	15 21

50 p =

Answer

How much change from £10 if I	
spend £2.45, £1.80 and £3.75?	£2

2	What must I sell a £60 table for	
	to make a profit of 30%?	£78

6 A park is approximately 300m

3	$2\frac{\pi}{2}$ gallons =	20	biurz
4	5lb 2oz – 3lb 10oz =	1lb	8oz

5 How many nours and minutes		
from 7.30 p.m. Friday to		
11.15 a.m. Monday?	6,3h,	45min

	square. What is its approximate area in hectares?		9h
7	A wooden cube has a volume of 125cm <sup>3</sup> . How long is the cube's edge?		5 <b>c</b> r

8	A line was enlarged by the scale	
	factor 4. The new line is 72mm long.	
	How long in centimetres was	
	the original line?	1 8cm

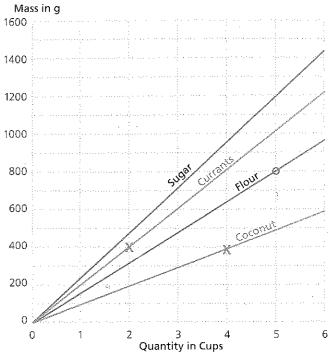
	How long in centimetres was the original line?	1.80
9	What is the number of axes of symmetry	٠

	of a rectangle?	
10	Approximate $2\frac{1}{4}$ million square	

metres to the nearest square kilometre.

13	Joe and Sidrah are baking cakes. Some of their recipes give
74	quantities in cups and some in grams. They measure out five

cups of flour and find that it weighs 800g. They plot a graph to convert from cups to grams.



Use the graph to answer the following questions.

1	What is the mass of one cup of flour?	160g
2	What is the mass of $2\frac{1}{2}$ cups of flour?	400g
3	About how many cups of flour	
	weigh 0.5kg?	3

Joe and Sidrah plot a conversion graph for sugar.

4	What is the mass of five cups of sugar?		1200g
5	About how many cups are needed		
	for 1kg of sugar?		4

6	Estimate the total mass of one cup of	
	sugar and two cups of flour.	 5600

	,	_
7	How many times heavier is sugar than	
	flour? (Hint: compare the mass of one	- 
	cup of sugar with one cup of flour.)	 12

Joe and Sidrah find that four cups of coconut weigh 380g and two cups of currants weigh 400g.

8	Plot	these	two	points	on	the	graph	above

9	Draw the conversion graphs for coconut
	and for currants.

10	About how many cups of currants	٠.
	weigh the same as five cups of flour?	

<b>1</b> 1	About how many cups are	needed
	for $\frac{1}{2}$ kg of coconut?	

A cake recipe needs three cups of flour, one cup of sugar and  $1\frac{1}{2}$  cups of currants.

12	Estimate the mass ingredients.	of a	all these			* 1
	ingredients.					IKG

10lb

2km<sup>2</sup>

11