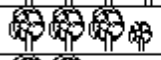
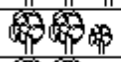
Chuckra 11+ Maths Paper 3

1 The table below shows the results of a survey on numbers of oak trees in the local parks. How many trees are in Hill Top Park?

Numbers of Oaks in Local Parks	
Key  stands for 10 oak trees  stands for less than 10 oak trees	
Castle Park	
Hill Top Park	
Riverside Park	
School Park	
Meadow Park	

Between 3 and 4	3.5	35	Between 30 and 40	40

2 There are 232 pupils at a school. Of these, 84 pupils have a pet dog. How many don't have a pet dog?

48	148	158	248	316

3 Which object is most likely to be about 2m wide?

A matchbox	A sandwich box	A computer keyboard	A doorway	A sofa

4 There are 672 children at a school event. Each child is allowed one free drink. Given that 307 chose orange, 201 chose apple and 155 chose blackcurrant flavour drinks, how many children did not choose any of these?

5	6	7	8	9

5 Which number is divisible by both 3 and 5?

8	35	52	53	90

6 Tracey owed her brother Dylan £22.60. She gives him £5.90 on Monday and £2.30 on Tuesday. How much does she now owe him?

£2.76	£8.20	£13.40	£14.40	£30.80

7 Which is the highest temperature?

8C	-10C	0C	0.9C	-2C

8 Below are sets of three numbers. Which set has only numbers that are multiples of 3 or 10?

8 9 10	9 15 20	10 15 16	12 18 28	16 21 30

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9 A surveyor asks 450 children whether they have ever been abroad or not and records the results and the ages of the children in a table. How many 12 year olds had never been abroad?

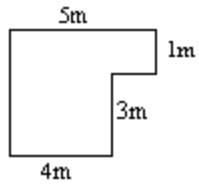
		Have you ever been abroad?	
		Yes	No
Age	10yrs	54	98
	11yrs	68	85
	12yrs	93	?

12	32	52	72	92

10 Lilian bought a pack of 12 pens and paid with a £2 coin. She received 20p change. How much did each pen cost?

12p	15p	16p	17p	20p

11 The diagram below shows the plan of a room. What is the perimeter of the room?



4m	5m	13m	18m	60m

12 Which of the five letters shown below has no lines of reflective symmetry?

P E T R O

R	P and R	E and T	O	O and R

13 Mugs are packed tightly in boxes designed to hold a maximum of 6. Bill has 125 mugs to package. How many boxes will he need to pack them all?

10	11	20	21	42

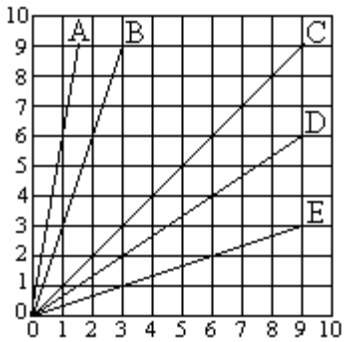
14 This machine multiplies numbers by 5 and then subtracts 3. Which number has been put in?



4	5	6	7	8

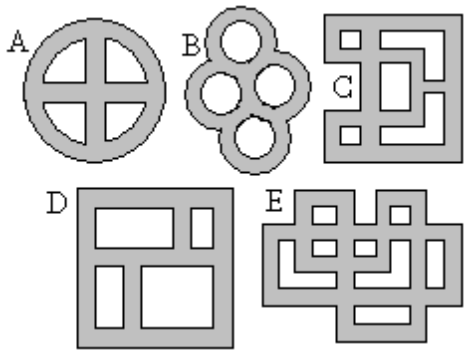
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15 This graph shows five lines. If the lines were extended, which would go through the point (18, 6)?



A	B	C	D	E

16 Elen and her friends are delivering leaflets around the local housing estates.
They want to choose a housing estate where they won't have to walk down the same street more than once (they can pass over the same corners more than once). On which of these is this possible?

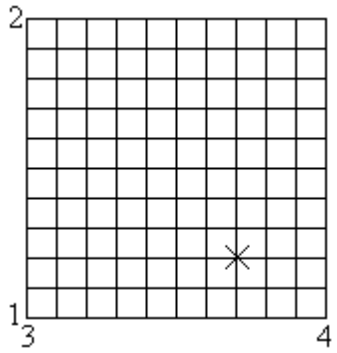


A	B	C	D	E

17 Jane's dad ices 18 little cakes for the school fete.
Each cake is decorated with 5 coloured sweets.
How many sweets are needed to decorate all the cakes?

18	40	50	80	90

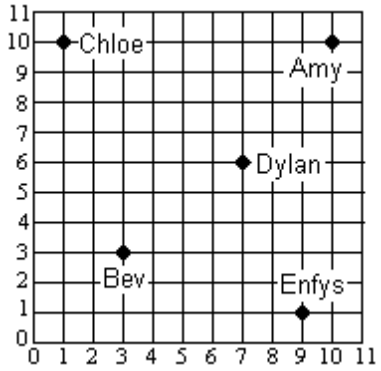
18 What are the coordinates of the cross in the grid shown below?



(3.7, 4.3)	(4.3, 3.7)	(3.7, 1.2)	(1.2, 3.7)	(1.2, 4.3)

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19 The grid below shows the co-ordinates of players in a computer game. Who is closest to the point (2, 10)?

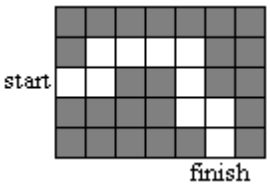


Amy	Bev	Chloe	Dylan	Enfys

20 A plan of a house uses a scale of 1cm to 3m. On the plan the living room is 1.5cm wide. What is the real length of the living room?

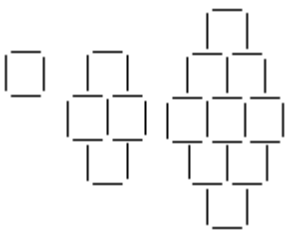
3m	3.25m	3.5m	4m	4.5m

21 Hakir wants to program a robot to travel along the path shown in the picture. The robot can only move FORWARD, TURN RIGHT 90° or TURN LEFT 90°.



FORWARD 2, LEFT 90°, FORWARD, RIGHT 90°, FORWARD 2, LEFT 90°, FORWARD, RIGHT 90°, FORWARD 2	FORWARD 2, LEFT 90°, FORWARD, RIGHT 90°, FORWARD 3, RIGHT 90°, FORWARD 2, LEFT 90°, FORWARD, RIGHT 90°, FORWARD	FORWARD 2, LEFT 90°, FORWARD, LEFT 90°, FORWARD 2, LEFT 90°, FORWARD 2, LEFT 90°, FORWARD, LEFT 90°, FORWARD 2	FORWARD 2, RIGHT 90°, FORWARD, LEFT 90°, FORWARD 2, LEFT 90°, FORWARD 2, RIGHT 90°, FORWARD, LEFT 90°, FORWARD 2	FORWARD, LEFT 90°, FORWARD, RIGHT 90°, FORWARD, RIGHT 90°, FORWARD 2, LEFT 90°, FORWARD, RIGHT 90°, FORWARD 2

22 How many matches are needed to make the next shape in the sequence?



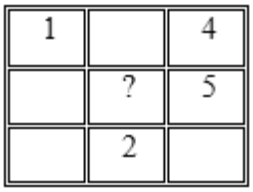
43	45	48	52	56

23 You multiply a number by itself. This answer is then multiplied by the number you started with. The answer is 216. What number did you start with?

2	4	6	8	12

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24 When this grid is filled in, every row and every column adds up to 10. What is the missing number in the grid below?

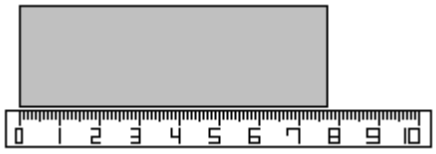


1	2	3	4	5

25 Apples cost £1.38 per kilo. How much will 1.5kg cost?

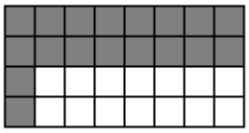
£1.88	£1.98	£2.07	£2.17	£2.28

26 The piece of card is being measured with a ruler. What is the measurement shown on the ruler?



0.7cm	7.05cm	7.5cm	7.7cm	8.03cm

27 What percentage of this grid is shaded (to the nearest 1%)?

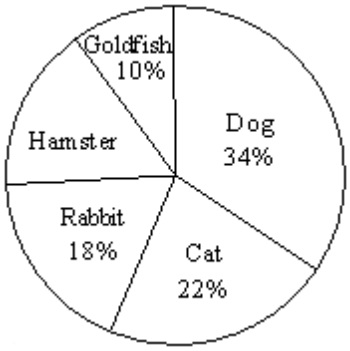


14%	18%	32%	56%	62%

28 Which number is closest in value to -2?

-2.01	-2.1	-1.999	-1.009	-1.9

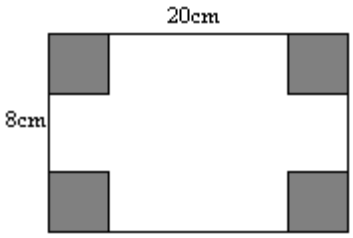
29 The pie chart shows the proportions of different pupils who named each type of animal as their first pet. If there were 68 pupils who said that their first pet was a dog, how many said that their first pet was a
hamster?



30	32	34	36	38

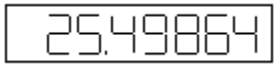
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30 The shaded corners, which are 6cm by 6cm, are cut out of this flat shape. It is then folded to make a small open box. What is the volume of the box?



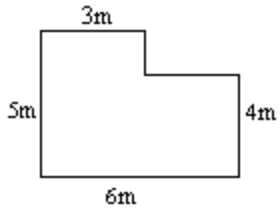
$35cm^3$	$40cm^3$	$160cm^3$	$960cm^3$	$5760cm^3$

31 What is this number to two decimal places?



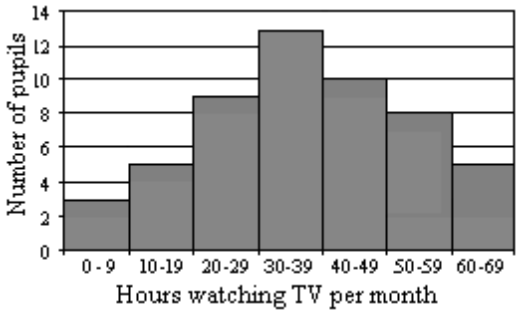
25.49	25.5	25.50	25	25.499

32 The diagram below shows the plan of a room.
What is the area of the floor?



$12m^2$	$15m^2$	$18m^2$	$24m^2$	$27m^2$

33 The bar chart shows the results of recording the number of hours of TV that pupils watch in a month.
Which statement must be true?



3 children watch less than 9 hours per month	Between 30 and 39 pupils watch exactly 13 hours per month	10 children watch more than 39 hours but less than 50 hours per month	No children watch 0 hours of TV per month	13 children watch between 30 and 50 hours per month

34 If $4x + 7 = 47$, what is the value of x?

5	6	10	15	20

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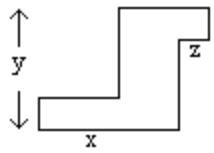
35 Shujon's parents are recording how many gold stars he earns at school.
The table shows how many stars he gained on each week day.

Day	Number of Stars
Monday	6
Tuesday	6
Wednesday	1
Thursday	2
Friday	5

What is the median number of stars for the week?

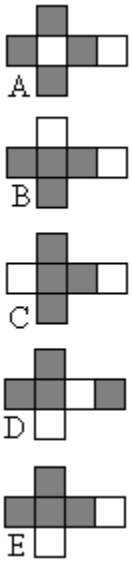
3 | 4 | 5 | 6 | 20

36 What is the perimeter of this shape?



x + y + z | xy + xz + yz | 2xy - 2z | 2x + 2y + 2z | 2x + 2y - z

37 Which of the nets shown below can be folded up to form a cube that looks different from the others?



A | B | C | D | E

38 Which row of the table below shows a prime, square and cube number in the correct order?

	Prime Number	Square Number	Cube Number
a	4	44	444
b	29	25	9
c	28	55	1000
d	17	10	8
e	19	49	27

A | B | C | D | E

39 Which one of these gives the answer of 50?

50% of 1000 | 2/5 of 75 | 1/5 of 300 | 20% of 500 | 1/3 of 150

40 On holiday Tharima buys some sweets for $2.00. She calculates that the sweets cost £1.05. How much would it cost in pounds for a book priced at $8.00?

£2.00 | £2.10 | £4.00 | £4.10 | £4.20

41 An isosceles triangle has angles X, Y and Z. The angle at X measures 56^{o} and the angles X and Y differ in size by 12^{o}. What is the size of the angle at Z?

12^{o} | 42^{o} | 48^{o} | 56^{o} | 68^{o}

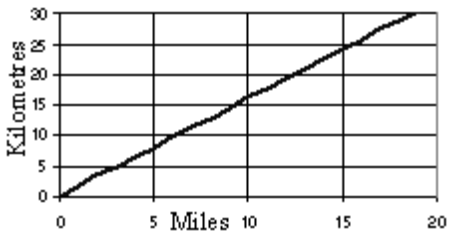
42 There are 900 pupils at a school. Two thirds of them have pets. How many pupils is this?

0.33 | 0.67 | 67 | 600 | 667

43 The herbs and spices in Matthew's gran's cupboard are:
bay, basil, cinnamon, coriander, cumin, ginger, mint, mace, nutmeg, parsley, rosemary, sage, saffron, thyme and tumeric.
What percentage of the items on this list include the letter M?

8% | Less than 25% | Less than 50% | More than 50% | More than 75%

44 The graph below converts between miles and kilometres. Approximately how many miles are there in 250 kilometres?



15 | 16 | 160 | 200 | 450

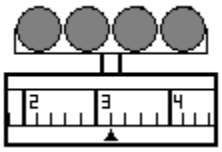
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45 What number is the arrow pointing to on the number line below?



0.502	0.52	0.54	0.57	0.7

46 What is the weight shown on the scales below?

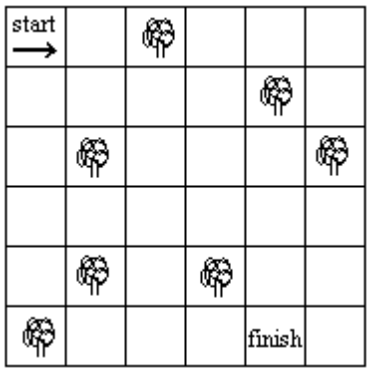


1.8	2.6	3.1	3.2	4.7

47 Marina is making a brooch and wants 3 beads to decorate it. She has 4 different colours of glass bead, 5 different colours of plastic bead and 2 types of painted bead. How many ways are there for her to choose one of each type?

4 + 5 + 2	4 x 5 x 2	3 x (4 + 5 + 2)	3 x 4 x 5 x 2	$(4 \times 5)^2$

48 Rob's granddad has an experimental remote controlled grass-cutting machine.
The machine starts off facing in the direction of the arrow. It can only move FORWARD, TURN LEFT 90^o or TURN RIGHT 90^o. Which set of directions will guide it from the point on the map marked "start" to the point marked "finish", without hitting any trees?



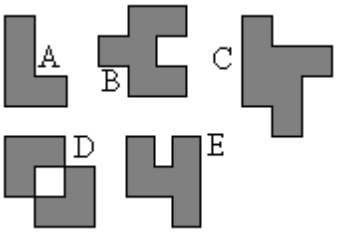
LEFT 90°, FORWARD 3, RIGHT 90°, FORWARD 4, LEFT 90°, FORWARD 2	RIGHT 90°, FORWARD 3, LEFT 90°, FORWARD 4, RIGHT 90°, FORWARD 2	FORWARD, LEFT 90°, FORWARD, RIGHT 90°, FORWARD 3, LEFT 90°, FORWARD 3, RIGHT 90°, FORWARD 3	FORWARD, LEFT 90°, FORWARD, RIGHT 90°, FORWARD 2, LEFT 90°, FORAWRD 3, RIGHT 90°, FORWARD 3	FORWARD, LEFT 90°, FORWARD, LEFT 90°, FORWARD 2, LEFT 90°, FORWARD 3, RIGHT 90°, FORWARD 3

49 The house is 30ft tall.
Which of the following is closest to this height in metres?

5m	10m	15m	20m	30m

.

50 Which of the shapes below has rotational symmetry?



A	B	C	D	E