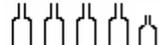


## Chuckra 11+ Maths Test 4

- 1 The table below shows how many bottles were collected in a bottle bank during one week. How many green bottles were put in the bottle bank?

Numbers of Bottles	
Key	
	stands for 100 bottles
	stands for less than 100 bottles
Clear	
Green	
Brown	
Other	

6                      55                      Between 5 and 6                      Between 50 and 60                      Between 500 and 600

- 2 There are 187 sweets in a jar. Liam takes 21. How many are left?

156                      158                      166                      168                      176

- 3 Approximately how much does a normal tin of baked beans weigh?

1g                      5g                      400g                      500g                      1000g

- 4 There are 293 children in a school. Of these, 81 have brothers but no sisters, 79 have sisters but no brothers and 45 have both brothers and sisters. How many have no brothers or sisters?

78                      87                      88                      90                      98

- 5 Which number is divisible by both 3 and 4?

7                      15                      36                      28                      43

- 6 Sam chooses CDs worth £19.86. He has discount vouchers totalling £2.50. How much money will he need to pay for the CDs?

£12.36                      £16.36                      £17.36                      £21.36                      £22.36

- 7 Which is the highest temperature?

-3C                      -1C                      0C                      0.5C                      -2C

- 8 Below are sets of three numbers. Which set has only numbers that are multiples of 2 or 5?

8, 9, 10                      9, 10, 20                      10, 12, 15                      12, 13, 20                      16, 21, 25

- 9 A survey records the favourite sport enjoyed by 90 pupils. The table shows the results. How many girls said that their favourite sport was football?

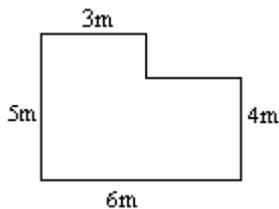
	Girls	Boys
Football	?	19
Rugby	4	12
Netball	17	3
Athletics	6	8
Swimming	10	4

6 | 7 | 8 | 9 | 10

- 10 Gemma, Ryan and Anna are each given fifteen strawberries from a box and there are two left over. How many strawberries were originally in the box?

17 | 42 | 47 | 52 | 62

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



5m | 6m | 22m | 27m | 30m

- 12 Which of the five letters shown below have two lines of reflective symmetry?

C H A Y X

A and H | C and Y | Y and X | Y and A | X and H

- 13 Bottles are packaged in large boxes, each containing a maximum of 12 bottles. There are 185 bottles. Which of the following statements is NOT true?

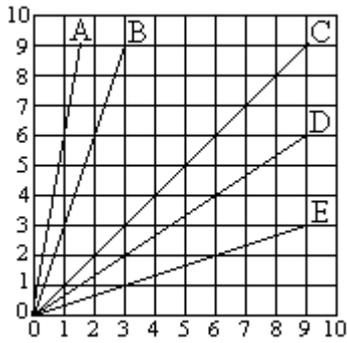
The bottles can be packed into 15 boxes	There are 15 full boxes and one box containing 5 bottles.	The bottles can be packed into 16 boxes.	If there were 7 more bottles, then all of the boxes would be full.	If 15 of the boxes are filled then one box will be less than half full.
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- 14 This machine multiplies numbers by 2 and then adds 6. Which number has been put in?



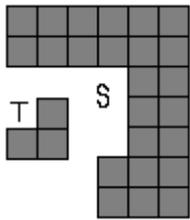
13 | 14 | 15 | 16 | 17

15 This graph shows five lines. Which line represents the relation  $y = x \div 3$ ?



A | B | C | D | E

16 How many times will shape T fit into shape S?

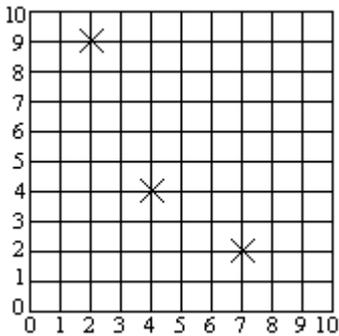


7 | 8 | 9 | 10 | 11

17 An author has written 12 chapters of a book. She estimates that each chapter contains 900 words. What is a good estimate for the number of words she has written?

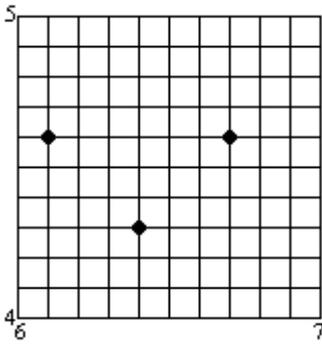
1080 | 10080 | 10800 | 18000 | 108000

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



(7, 2), (4, 4) and (2, 7), (4, 4) and (7, 2), (4, 4) and (7, 9), (4, 4) and (7, 2), (4, 4) and (2, 9)

- 19 The grid below has three points marked. When a fourth point is added the dots can be joined to make a square.  
What are the coordinates of the new point?

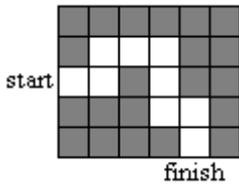


- (6.3, 4.8) | (6.4, 4.9) | (4.9, 6.3) | (4.9, 6.4) | (4.9, 6.5) |

- 20 A plan of a house uses a scale of 5cm to 1m. On the plan the hall is 12cm long. What is the real length of the hall?

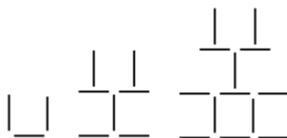
- 60cm | 2.2m | 2.4m | 5m | 60m |

- 21 Angie wants to program a robot to travel along the path shown in the picture. The robot can only move FORWARD, TURN RIGHT 90° and TURN LEFT 90°. What instructions will take the robot through the maze, (starting and finishing outside the maze, at the points labelled)?



- |   |  |  |  |   |
|---|--|--|--|---|
| FORWARD 2,<br>LEFT 90°,<br>FORWARD 1,<br>RIGHT 90°,<br>FORWARD 2,<br>RIGHT 90°,<br>FORWARD 2,<br>LEFT 90°,<br>FORWARD 1,<br>RIGHT 90°,<br>FORWARD 2 | FORWARD 2,<br>LEFT 90°,<br>FORWARD 1,<br>RIGHT 90°,<br>FORWARD 3,<br>RIGHT 90°,<br>FORWARD 2,<br>LEFT 90°,<br>FORWARD,<br>RIGHT 90°,<br>FORWARD 1,<br>LEFT 90°,<br>FORWARD 2 | FORWARD 2,<br>LEFT 90°,<br>FORWARD 1,<br>LEFT 90°,<br>FORWARD 2,<br>LEFT 90°,<br>FORWARD 2,<br>LEFT 90°,<br>FORWARD 1,<br>LEFT 90°,<br>FORWARD 2 | FORWARD 2,<br>RIGHT 90°,<br>FORWARD 1,<br>LEFT 90°,<br>FORWARD 2,<br>LEFT 90°,<br>FORWARD 2,<br>RIGHT 90°,<br>FORWARD 1,<br>LEFT 90°,<br>FORWARD 2 | FORWARD 1,<br>LEFT 90°,<br>FORWARD 1,<br>RIGHT 90°,<br>FORWARD 1,<br>RIGHT 90°,<br>FORWARD 2,<br>LEFT 90°,<br>FORWARD 1,<br>RIGHT 90°,<br>FORWARD 2 |
|---|--|--|--|---|

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



- 20 | 21 | 22 | 23 | 24 |

23 You multiply a number by itself. The answer is then multiplied by 5.  
The final answer is 180.  
What number did you start with?

5

6

7

8

9

24 All the rows and columns in the grid below add up to 20. What number goes in the square containing the question mark?

5		11
3	?	
	1	

11

12

13

14

15

25 Potatoes cost £0.62 per kilo. How much will 5.5kg cost?

£3.10

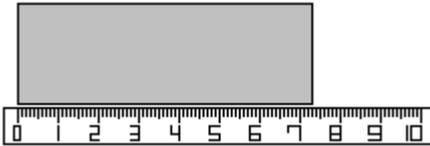
£3.41

£3.50

£5.41

£34.10

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



0.73

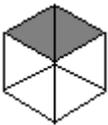
7.03

7.3

73

70.3

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



2%

6%

30%

33%

40%

28 Given that  $x$  is one third of  $y$ . Which of the following is not true?

$y = 3x$

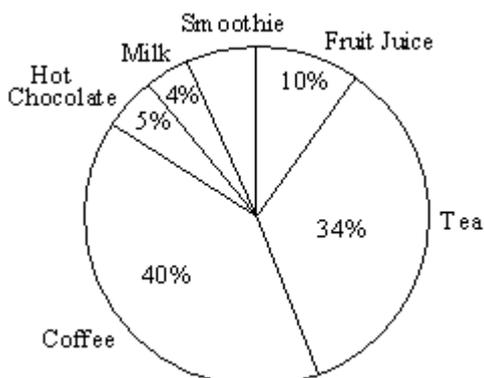
$3y = x$

$y \div x = 3$

$x \div y = 1/3$

$y = x + 3$

29 The pie chart shows the proportions of different drinks chosen from a café serving breakfast one morning. There were 300 drinks sold in total.  
How many of these were smoothies?



7

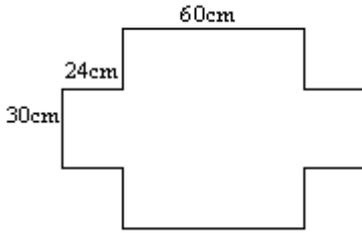
8

14

15

21

- 30 The shaded corners are cut out of this flat shape. It is then folded to make an open box. What is the volume of the box?



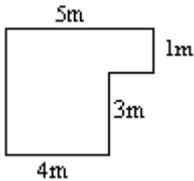
- 90cm<sup>3</sup> | 180cm<sup>3</sup> | 1800cm<sup>3</sup> | 4320cm<sup>3</sup> | 43200cm<sup>3</sup>

- 31 What is this number rounded to two decimal places?

89.45369

- 89 | 90 | 89.44 | 89.45 | 89.46

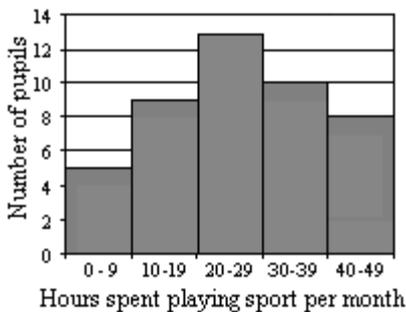
- 32 The diagram below shows the plan of a room. What is the area of the floor?



- 17m<sup>2</sup> | 21m<sup>2</sup> | 22m<sup>2</sup> | 25m<sup>2</sup> | 120m<sup>2</sup>

- 33 The bar chart shows the number of hours that pupils spend playing sport each month.

Which statement must be true?



- One child plays sport for exactly 40 hours. | Eight children play sport for 40 hours or more. | Exactly 42 children play sport for more than 10 hours but less than 40 hours per month. | Between 10 and 19 children play sport for exactly 9 hours per month. | Exactly 5 children play sport for at least 9 hours.

- 34 If  $A = 3B + C - 2D$  and  $B = 2$ ,  $C = 5$  and  $D = 1$  then what is  $A$ ?

- 8 | 9 | 10 | 15 | 20

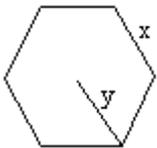
- 35 Mrs Jones is recording how many eggs her hens lay.  
The table shows how many eggs the hens laid over a whole week.

Day	Number of Eggs
Monday	9
Tuesday	8
Wednesday	2
Thursday	4
Friday	8
Saturday	11
Sunday	7

Which of the following is true?

- The mean was 8 | The mode was 7 | The median was 8 | The range was 11 | The median was not the same as the mode

- 36 The diagram shows a regular hexagon. What is the perimeter?

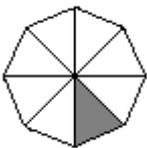


- 6y | 6xy | x + y | 6x + 6y |  $x^6$

- 37 Matthew and his younger brother Nigel eat biscuits every day when they get home from school. A packet contains 32 biscuits. Matthew eats  $m$  biscuits and Nigel eats only  $n$ . After 5 days there are 2 biscuits left.  
Which answer is correct?

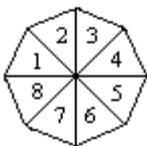
- $m = 3$  and  $n = 2$  |  $m = 4$  and  $n = 3$  |  $m = 4$  and  $n = 1$  |  $m = 4$  and  $n = 2$  |  $m = 3$  and  $n = 1$

- 38 The area of the shaded triangle is  $250\text{mm}^2$ . What is the area of the whole shape?



- $1000\text{mm}^2$  |  $2000\text{mm}^2$  |  $3000\text{mm}^2$  |  $4000\text{mm}^2$  |  $5000\text{mm}^2$

- 39 The picture below shows a spinner. What is the probability that it will land on a number which is divisible by 3?



- 2% | 8% | 20% | 25% | 30%

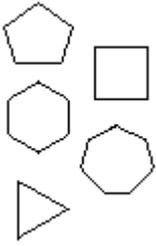
- 40 At Fiona's school there are 640 children. 95% like chocolate. How many do not like chocolate?

- 5 | 32 | 46 | 64 | 608

41 Gretchen pays  $x$  dollars for a CD on her holiday. She then buys 5 pens which each cost  $y$  dollars and a book which costs  $z$  dollars. How much is this in total?

- $z \times (y \div x)$  |  $z \times (x \div y)$  |  $x + y + z$  |  $5(x + y + z)$  |  $x + 5y + z$

42 Which shape is not included in the picture below?

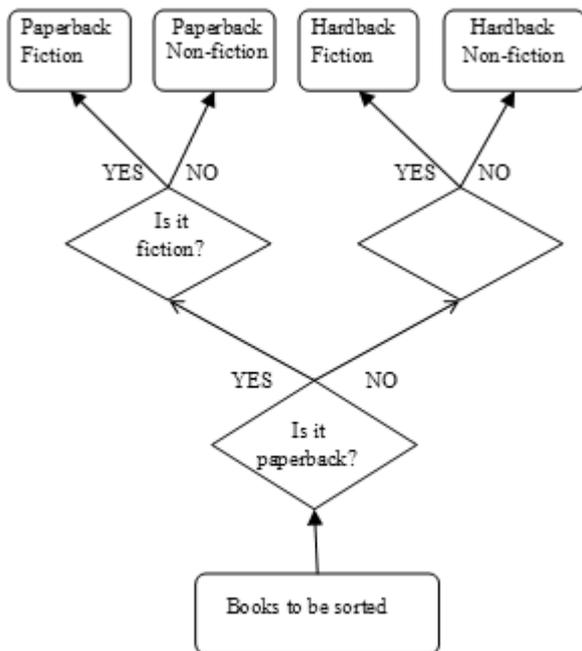


- pentagon | rhombus | hexagon | triangle | heptagon

43 Two coaches are booked for the school trip. The first coach seats 53 and the second seats 41 passengers. There are 8 adults, 37 girls and 42 boys going on the trip. What percentage of the seats will be empty (to the nearest 1%)?

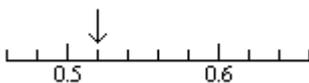
- 5% | 7% | 9% | 11% | 13%

44 The decision tree below is used for sorting books. What is missing from the empty shape?



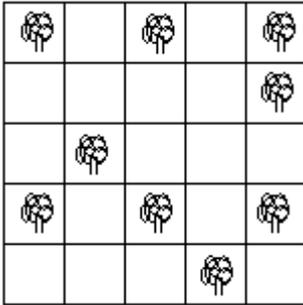
- Is it fiction? | Paperbacks | Is it a paperback? | Is it non-fiction? | Non-fiction

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



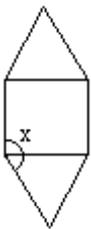
- 0.06 | 0.07 | 0.51 | 0.52 | 0.6

46 Below is a grid. A square is chosen at random. What is the probability that there is a tree in the chosen square?



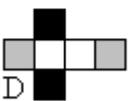
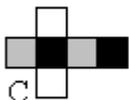
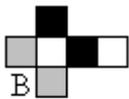
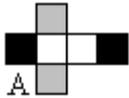
- 30% | 32% | 34% | 36% | 38%

47 The shape below has been made by combining two equilateral triangles and a square. What is the size of the angle  $x$ ?



- 30 | 60 | 90 | 120 | 150

48 Which net below would make a cube where no two sides of the same colour are next to each other?

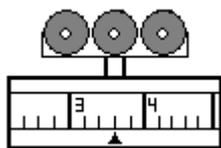


- A | B | C | D | E

49 The table is 3ft high. Which of the following is closest to this height in metres?

- 0.5m | 0.75m | 1.0m | 1.25m | 1.5m

50 What is the reading on the measuring scales?



2.1

3.3

3.6

4.9

5.1