Chuckra 11+ Maths Test 1

1 The table below shows how many people own each type of pet. How many people own pet cats?

☺ = 50 people

Type of Pet	
Dog	☺ ☺ ☺ ☺
Cat	☺ ☺ ☺
Rabbit	☺ ☺
Fish	☺ ☺
Other	☺ ☺

4 | 50 | 150 | 300 | 2000

2 There are 310 tourists on a plane for London. Of these, 185 people are travelling beyond London. How many will remain in London?

25 | 115 | 125 | 175 | 215

3 Which container will hold around half a litre?

An egg cup | A teacup | A soft drinks can | A one pint milk bottle | A kettle

4 At a football match, there are 980 people; 685 of these support the home team and 273 support the away team.
How many support neither team?

22 | 122 | 295 | 412 | 707

5 Which number is divisible by both 2 and 3?

5 | 12 | 23 | 32 | 33

6 Mrs Evan's grocery bill came to £52.15. She hands over five £10 notes, two £1 coins and a 50p piece.

How much change should she receive?

25p | 35p | 45p | 55p | 65p

7 Which is the highest temperature?

15 | -3 | 0 | 5 | -20

8 Below are sets of three numbers. Which set has only numbers that are multiples of 3 or 4?

8, 9, 10 | 9, 10, 20 | 10, 12, 16 | 12, 18, 20 | 16, 21, 25

9 The park and the nearby avenue contain 80 trees altogether.
The table shows the types of trees that can be found in each place.
How many lime trees are in the park?

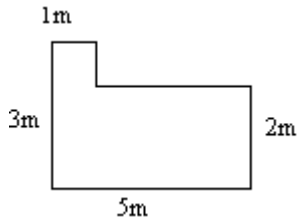
	Oak	Ash	Lime
Park	21	18	?
Avenue	5	0	23

3 | 13 | 23 | 63 | 67

10 Joe, Amy and Marie are each given 12 sweets from a tin and 15 remain.
How many sweets were originally in the tin?

15	27	36	39	51

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



3m	5m	11m	15m	16m

12 Which of the five letters shown below has two lines of symmetry?

A M Y H K

A	M	Y	H	K

13 Sweets are packaged in small boxes, each containing 6 sweets. There are 132 sweets altogether.
How many boxes are needed to pack them all?

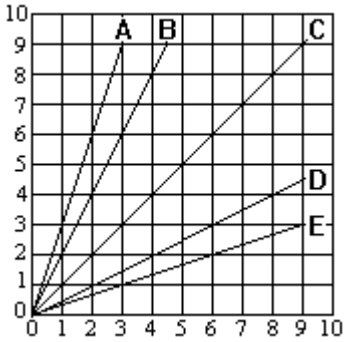
126	60	22	20	18

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



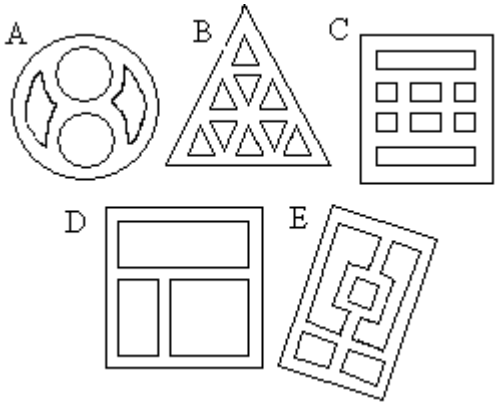
25	30	35	40	90

15 This graph shows five lines. Which line represents the relation y = 2x?



A	B	C	D	E

16 Jason and his friends are delivering leaflets around the local housing estates.
Jason wants to choose a housing estate where he won't have to walk down the same street more than once (he can pass over the same corners more than once). On which of these five street plans is this possible?

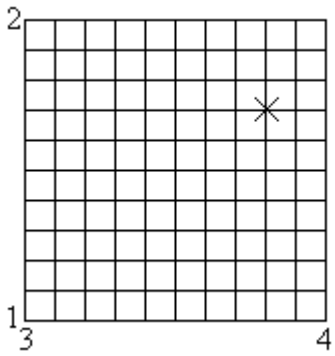


A	B	C	D	E

17 A carpenter constructs 15 bookshelves.
Each bookshelf is fixed together with 112 screws.
How many screws are needed for all the bookshelves?

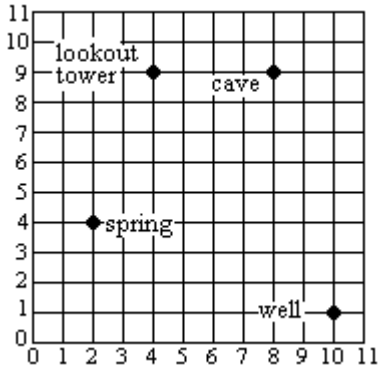
7	8	1068	1680	1860

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



(3, 1)	(1, 3)	(3.8, 4.2)	(3.8, 2.3)	(3.8, 1.7)

19 The grid below covers a map of an island used in a computer game. What are the coordinates of the cave?

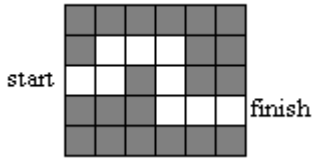


(9, 8)	(9, 9)	(8, 9)	(0, 9)	(8, 8)

20 A plan of a house uses a scale of 2cm to 3m. On the plan the living room is 3cm long. What is the real length of the living room?

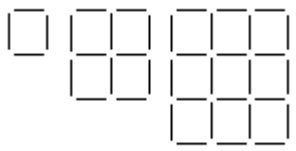
3cm	3m	4m	4.5m	6m

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, LEFT 90°, FORWARD 1, RIGHT 90°, FORWARD 2, RIGHT 90°, FORWARD 2, LEFT 90°, FORWARD 3	FORWARD 2, LEFT 90°, FORWARD 1, RIGHT 90°, FORWARD 3, RIGHT 90°, FORWARD 2, LEFT 90°, FORWARD, RIGHT 90°, FORWARD 3	FORWARD 2, LEFT 90°, FORWARD 1, LEFT 90°, FORWARD 2, LEFT 90°, FORWARD 2, LEFT 90°, FORWARD 1, LEFT 90°, FORWARD 2	FORWARD 2, RIGHT 90°, FORWARD 1, LEFT 90°, FORWARD 2, LEFT 90°, FORWARD 2, RIGHT 90°, FORWARD 1, LEFT 90°, FORWARD 2	FORWARD 1, LEFT 90°, FORWARD 1, RIGHT 90°, FORWARD 1, RIGHT 90°, FORWARD 2, LEFT 90°, FORWARD 1, RIGHT 90°, FORWARD 2

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



16	20	24	40	64

23 You multiply a number by itself. The answer is then multiplied by the number you started with. The answer is 125.
What number did you start with?

2	3	5	10	25

24 What is the missing number in the grid below?

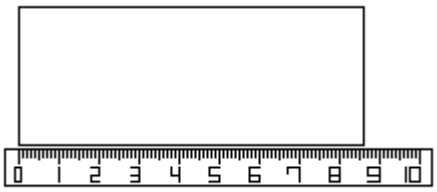
4	8	12
8	?	16
12	16	20

2	4	6	12	16

25 Bananas cost £1.52 per kilo. How much will 1.2 kg cost?

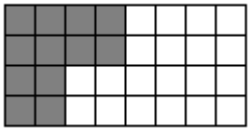
£1.52	£1.72	£1.82	£2.32	£2.72

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



0.5	0.6	8.05	8.06	8.6

27 What percentage of this grid is shaded?

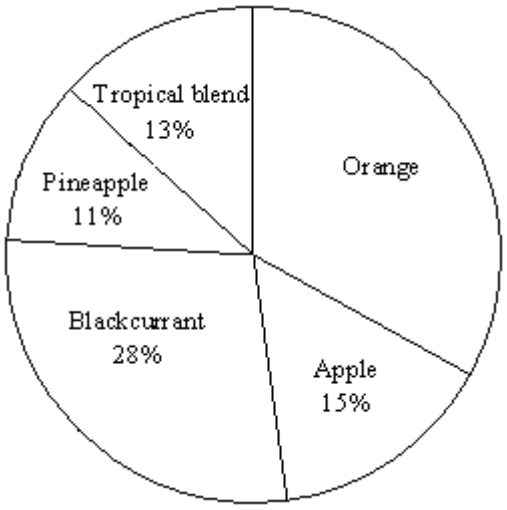


30%	32.5%	35%	37.5%	40%

28 Which number is closest in value to 2?

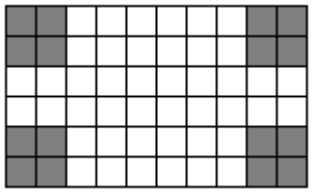
2.01	2.1	1.999	2.009	1.9

29 The pie chart shows the proportions of different drinks chosen from a machine in one day.
There were 15 cartons of pineapple juice taken. How many cartons of orange juice were taken?



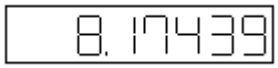
33	35	45	50	120

30 Each small square in the diagram is 2cm by 2cm.
The shaded corners are cut out of this flat shape. It is then folded to make a small open box.
What is the volume of the box?



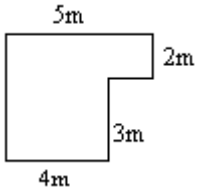
$4cm^3$	$24cm^3$	$44cm^3$	$96cm^3$	$192cm^3$

31 What is this number rounded to one decimal place?



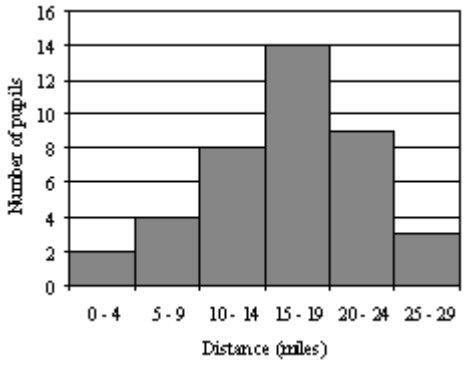
8	8.0	8.1	8.17	8.2

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



$17m^2$	$20m^2$	$22m^2$	$25m^2$	$120m^2$

33 The bar chart shows the distances that the pupils from one class travel to school each day.
Which statement must be true?



One child travels exactly 4 miles	No children travel more than 28 miles	Exactly 16 children travel more than 15 miles but less than 20 miles	Exactly 8 children travel between 10 and 14 miles	Exactly 6 children travel at least 9 miles

34 Find the value of x if 3x + 5 = 20 - 3

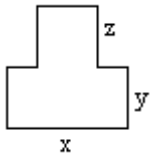
1	1.275	4	7.5	12.5

35 Matthew's parents are recording how many gold stars he earns at school.
The table shows how many stars he gained on each week day.
The mean is 5 and the median is 4.
How many stars did he gain on Friday?

Day	Number of Stars
Monday	9
Tuesday	8
Wednesday	3
Thursday	4
Friday	?

1	2	3	4	5

36 What is the perimeter of this shape?



2x + 2y	xy + xz + yx	2xyz	2x + 2y + 2z	x + y + z

37 Steve and Paul often visit their friend Andrew.
Over a period of 4 weeks, Steve visits every second day and Paul visits every third day.
Both Steve and Paul are at Andrew's house together on the first day.
How many times are both of them visiting him at the same time in the 28 day period?

5	6	7	8	9

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	13	25	9
b	14	23	64
c	33	16	36
d	19	4	81
e	7	36	27

a	b	c	d	e

39 Michael has 3 pound coins, 1 fifty pence piece and 2 twenty pence pieces in his pocket. He picks a coin at random. In which of these are **both** statements true?

He is certain to pick a coin. He has less than even chance of picking a pound coin.	He has an even chance of picking a pound coin. He is certain to pick a fifty pence piece.	He has a less than even chance of picking a fifty pence piece. He has an even chance of picking a twenty pence piece.	He has a less than even chance of picking a twenty pence piece. He has an even chance of picking a pound coin.	He has a more than even chance of picking a pound coin. He has a less than even chance of picking a twenty pence piece.

40 On holiday Craig buys some sweets for $3.00 and a CD for $15.00.
He calculates that the sweets cost £1.54 and the CD cost £7.69. How much would it cost in pounds for a T shirt priced at $12.00?

£6.05	£6.15	£6.25	£6.35	£6.45

41 In 5 years time, Leonie will be x years old. How old was she 6 years ago?

x - 6	x - 5	x + 6	x + 5 + 6	x - 5 - 6

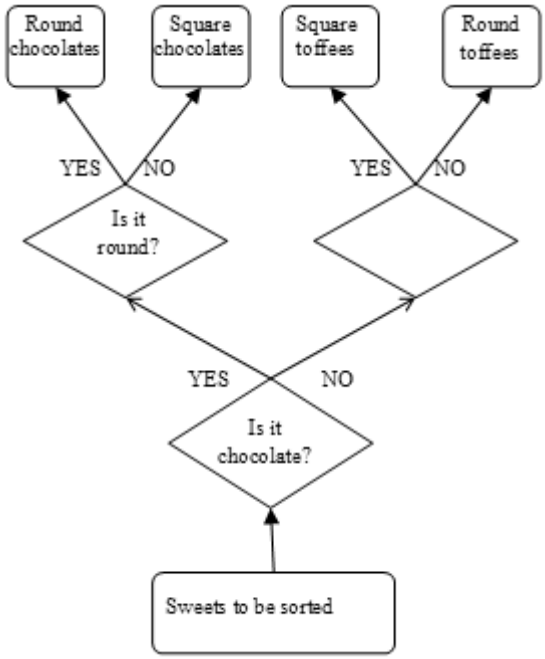
42
There are 201 pupils at a school fete. $\frac{2}{3}$ of them bought tickets for the raffle. How many pupils is this?

30	60	67	134	167

43 A shopping list includes the following items:
apples, bananas, biscuits, bread, broccoli, carrots, jam, milk, mushrooms, peas and potatoes.
What percentage of the items on the list begins with the letter B?

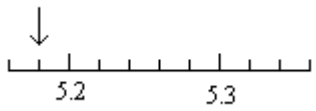
32%	34%	36%	38%	40%

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



Round sweets	Is it square?	Is it toffee?	Is it round?	Chocolates

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



4.8	4.9	4.88	5.18	5.19

46 This is the list of names of pupils in a class:

Aaron	Bryn	Callum
Dafydd	Emma	Gerallt
Isobel	Joanne	Kevin
Morgan	Owen	Rowen
Sam	Tahawar	Timmy

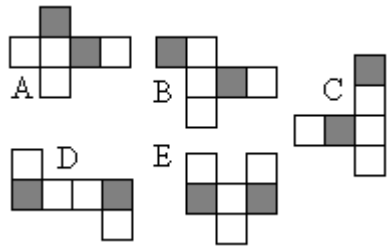
If a pupil is chosen at random, what is the probability that their name ends in N?

100%	80%	60%	40%	20%

47 Steph is assembling gift bags for a party. She has 2 types of chocolate bars, 4 types of toys and 3 types of pens.
Which shows the number of possible combinations of chocolate bars, toys and pens in a bag?

2 + 4 + 3	2 x 4 x 3	(2 x 4) + (2 x 3)	(2 + 4) x (4 + 3)	(2 x 3) + (3 x 4)

48 Which net below would make a cube where the two shaded sides are not next to each other?

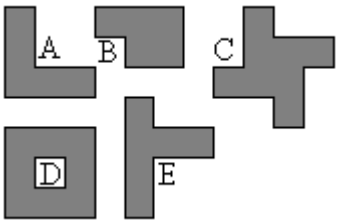


A	B	C	D	E

49 John is 6ft tall.
Which of the following is closest to his height in metres?

1.2m	1.4m	1.6m	1.8m	2m

50 Which of the shapes below have rotational symmetry?



A and C	A and E	B and C	B and E	C and D