Mathematics 1

Familiarisation

Read the following with your child:

1. This is a multiple-choice paper, in which you have to mark your answer to each question on the separate answer sheet. You should mark only one answer for each question.
2. Draw a firm line clearly through the rectangle next to your answer like this . If you make a mistake, rub it out as completely as you can and put in your new answer.
3. Be sure to keep your place in the correct section of the answer sheet. Mark your answer in the box that has the same number as the question in the booklet.
4. You may find some of the questions difficult. If you cannot do a question, **do not waste time on it but go on to the next**. If you are not sure of an answer, choose the one you think is best.
5. **Work as quickly and as carefully as you can.**

GL Assessment

1 **What is this number in figures:**

five thousand, one hundred and nine.

A 5190 **B** 5019 **C** 519 **D** 51009 **E** 5109

2  stands for 12 ships.

Look at this table.

Dock	Number of Ships
A	
B	
C	

How many more ships are in dock A than dock C?

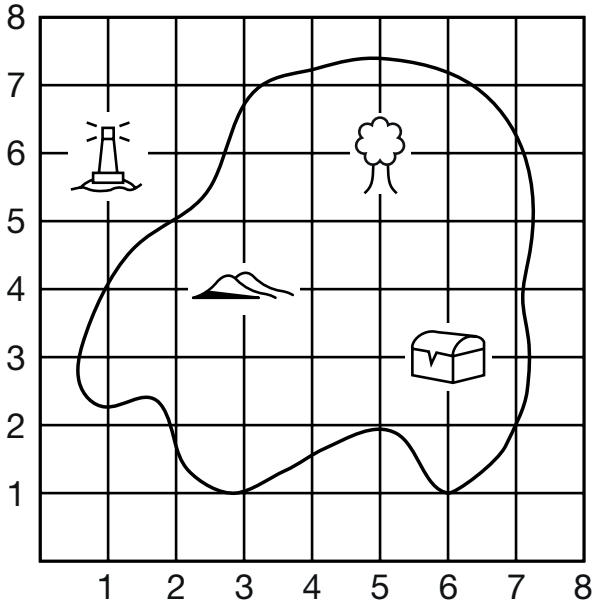
A 0.5 **B** 1 **C** 3 **D** 4 **E** 6

3 **What is the value of the 7 in this number?**

7240

A 7 thousands
B 7 hundreds
C 7 tens
D 7 ones
E 7 thousandths

4



The hills are at (3 , 4).

The lighthouse is at (,)

A (6 , 1) **B** (1 , 6) **C** (5 , 6) **D** (6 , 3) **E** (1 , 7)

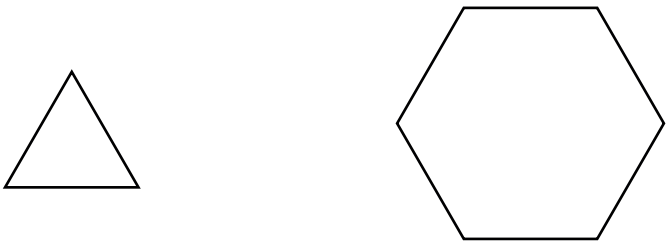
5

What is the missing number in this sequence?

393 384 375 ☐ 357

A 367 **B** 368 **C** 365 **D** 369 **E** 366

6



How many of the triangles will fill the hexagon?

A 10 **B** 9 **C** 8 **D** 6 **E** 4

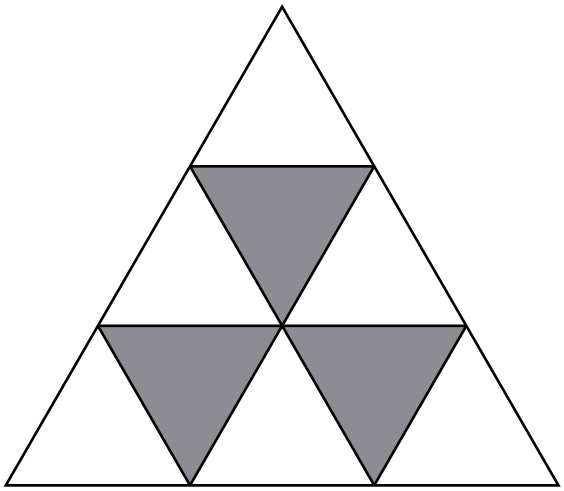
7

Iveta was 1.43 metres tall.
She grew 2 centimetres more.

How tall was she then in metres?

A 1.45 m **B** 1.63 m **C** 1.65 m **D** 1.405 m **E** 1.603 m

8



What fraction of the whole shape is shaded?

A $\frac{3}{10}$ **B** $\frac{1}{3}$ **C** $\frac{3}{8}$ **D** $\frac{1}{4}$ **E** $\frac{3}{11}$

9

Write the correct number in the box.

123 ÷ ☐ = 123

A 123 **B** 0 **C** 0.1 **D** 0.5 **E** 1

10

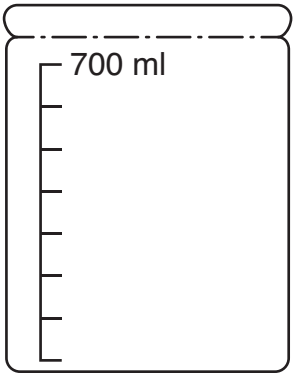
$a - 9 = 10$

a = ?

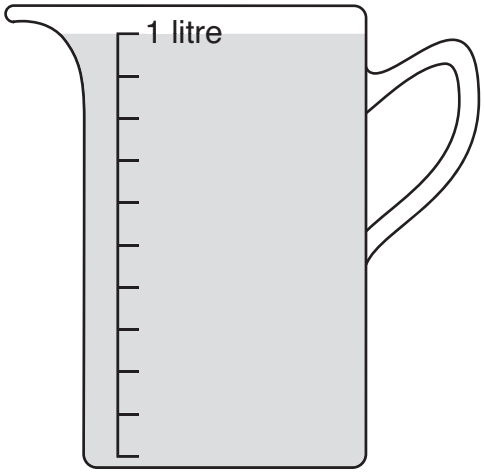
A 19 **B** 1 **C** –1 **D** 21 **E** –19

11

An empty jar – 700 ml



A jug holding 1 litre of water



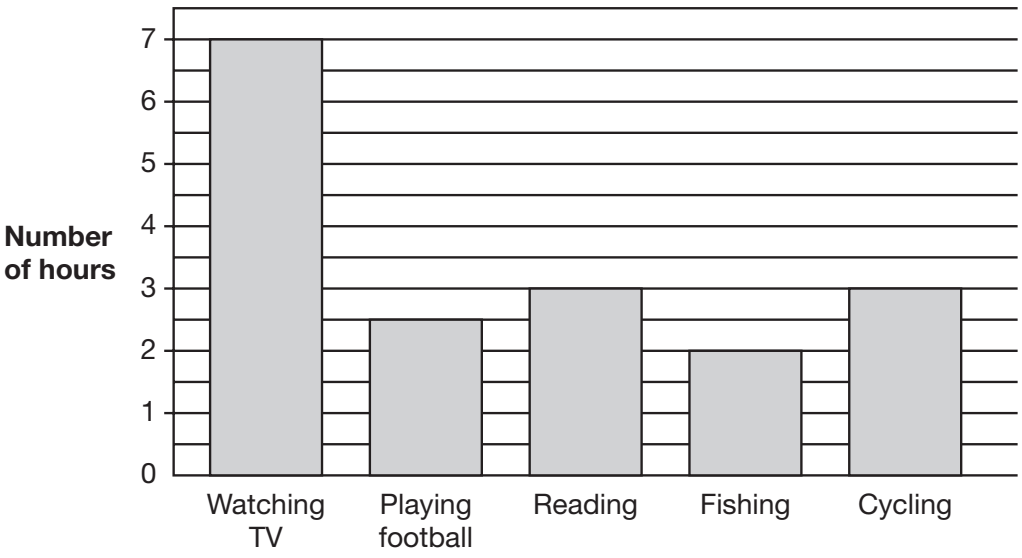
The jug holds 1 litre of water.
The jar is **filled** from the jug.

How much water will be left in the jug?

A 0.3 l **B** 0.25 l **C** 400 ml **D** 0.35 l **E** 200 ml

12

This chart shows how Kai spent his spare time last week.



How many hours did he spend out of doors?
(playing football, fishing and cycling)

A 6.5 hours **B** 7 hours **C** 7.5 hours **D** 8 hours **E** 8.5 hours

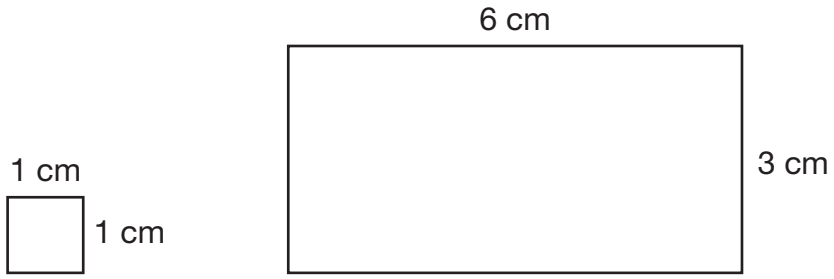
Please go on to the next page >>>

13 Wendy saved £2.50 a week.

How many weeks did it take her to save £20?

A 4 weeks **B** 8 weeks **C** 9 weeks **D** 10 weeks **E** 14 weeks

14



How many small squares will fit into the large rectangle?

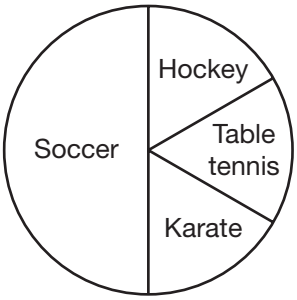
A 12 **B** 15 **C** 18 **D** 21 **E** 24

15 The diameter of a circle is 20 cm.

How far is the centre from the circumference (in cm)?

A 20 cm **B** 10 cm **C** 15 cm **D** 5 cm **E** 12 cm

16 222 children each voted for their favourite games.
This pie chart shows the results.



How many children voted for karate?

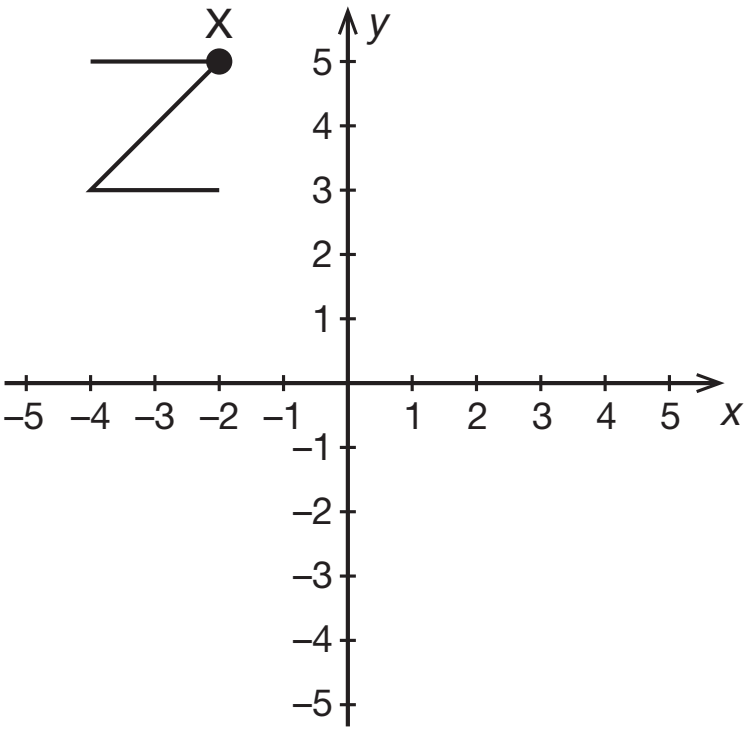
A 27 **B** 35 **C** 37 **D** 54 **E** 55

17 A train left at 10.20.
It arrived at 11.15.

How long did the journey take, in minutes?

A 45 mins **B** 55 mins **C** 65 mins **D** 75 mins **E** 95 mins

18



If the Z-shape is reflected in the y-axis, what will be the new coordinates of point X?

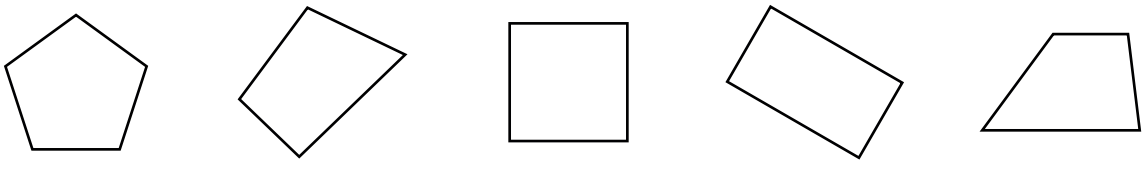
A (4 , 5) **B** (4 , 3) **C** (2 , 3) **D** (2 , 5) **E** (5 , 2)

19 I took 4 hours to travel 240 miles.

What was my average speed, in miles per hour?

A 40 mph **B** 60 mph **C** 70 mph **D** 80 mph **E** 90 mph

20



A **B** **C** **D** **E**

Which of these is NOT a quadrilateral?

A A **B** B **C** C **D** D **E** E

21

Here is part of a train timetable.

Purley	. . . .	. . . .	. . . .	23:21	. . . .
East Croyden	22:56	23:01	23:10	23:27	23:30
Norwood Junc.	. . . .	. . . .	. . . .	. . . .	. . . .
London Bridge	. . . .	. . . .	. . . .	. . . .	. . . .
Clapham Junc.	23:07	23:13	23:21	23:37	23:40
Victoria	23:12	23:18	23:27	23:43	23:45

A train leaves East Croyden at 23:27.

How long does it take to get to Victoria?

A 6 mins **B** 10 mins **C** 13 mins **D** 16 mins **E** 26 mins

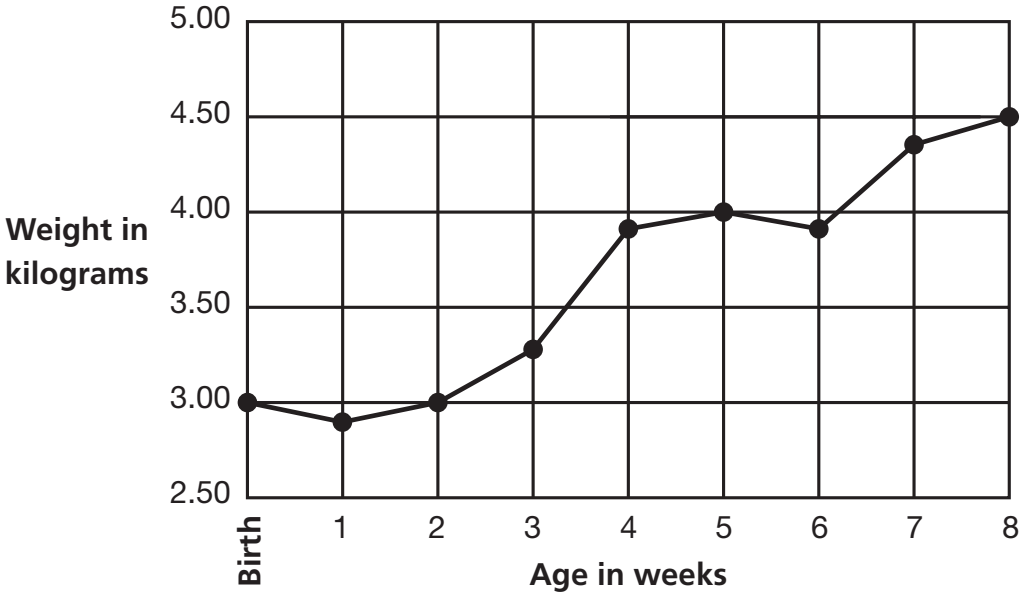
22

What percentage of £5 is 50p?

A 1% **B** 5% **C** 10% **D** 20% **E** 50%

23

The graph shows the weight of a baby girl in the first 8 weeks of her life.



How old was the baby at the end of the week in which she gained most weight?

A 2 weeks **B** 3 weeks **C** 4 weeks **D** 7 weeks **E** 8 weeks

24

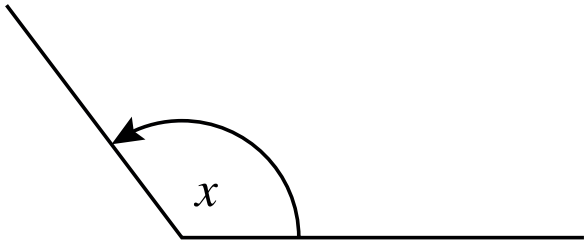
A joint Scout and Girl Guides trip is being planned to the ice-skating rink.
The normal cost is £6.50 per person.
However, a group booking reduces the normal cost by 6%.

How much money would be saved per person by making a group booking?

A £3.90 **B** £1.95 **C** 78p **D** 39p **E** 29p

25

Look at this angle.



Select the correct answer.

A Angle x is less than 90 degrees.
B Angle x is a right angle.
C Angle x is more than 180 degrees.
D Angle x is between 90 and 180 degrees.
E Angle x is 180 degrees.

26

105 ÷ ▽ = 21

What number does ▽ stand for?

A 4 **B** 5 **C** 6 **D** 7 **E** 15

27

This table shows how long Layla took to walk to school each day last week.

Day	Time taken
Monday	15 minutes
Tuesday	12 minutes
Wednesday	18 minutes
Thursday	17 minutes
Friday	13 minutes

What was the average time taken, in minutes?

A 11 mins **B** 13 mins **C** 15 mins **D** 16 mins **E** 17 mins

28 A boy delivered newspapers.
He was paid £1.40 for every 100 papers he delivered.

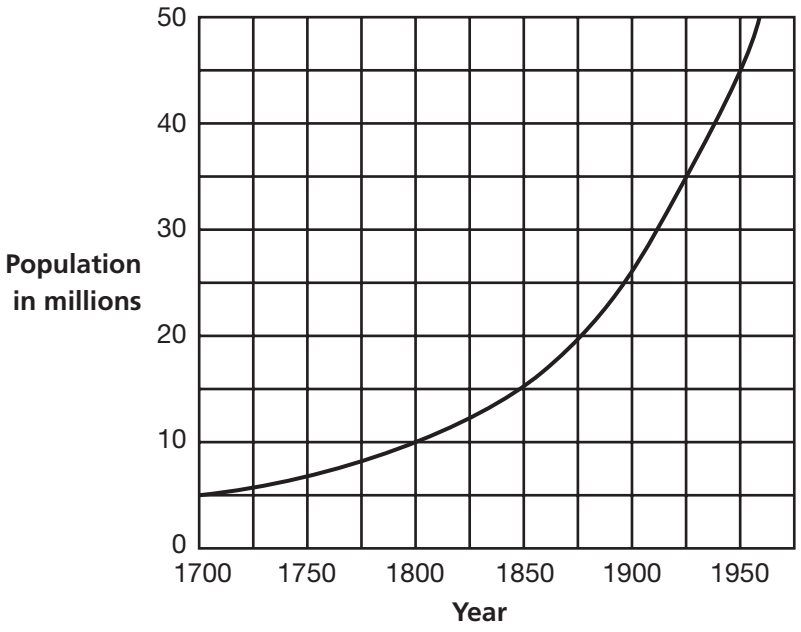
How much was he paid for delivering 250 papers?

A £2.80 **B** £3.40 **C** £3.50 **D** £4.20 **E** £4.40

29 **3.6 × 10 =**

A 0.36 **B** 0.036 **C** 36 **D** 360 **E** 36.6

30 The graph shows the population of Britain from 1700.



In which year was the population twice as much as it was in 1800?

A 1850 **B** 1875 **C** 1895 **D** 1900 **E** 1910

31

A bag had 36 sweets in it.

Ethan took out $\frac{2}{3}$ of them.

How many sweets did he take out?

A 12 **B** 18 **C** 22 **D** 24 **E** 26

32

A ship travels 528 nautical miles in one day.

How many nautical miles does it travel in 15 days?

A 3168 **B** 3173 **C** 7920 **D** 7925 **E** 7950

33

9 36 81

The three numbers above are alike in some ways.

Select ONE of the following to say one way in which they are alike.

A They are all even numbers.
B They are all two-figure numbers.
C They are all prime numbers.
D They are all square numbers.
E They can all be divided exactly by 2.

34

Mateo's temperature is 37.5°C.
When he was ill it rose 3°C.

What was his temperature when he was ill?

A 37.8°C **B** 47.5°C **C** 34.5°C **D** 37.2°C **E** 40.5°C

35

Put these fractions in order of size, starting with the largest first.

$\frac{3}{4}$ $\frac{5}{8}$ $\frac{1}{2}$ $\frac{7}{8}$ $\frac{1}{4}$

A $\frac{7}{8}$ $\frac{3}{4}$ $\frac{5}{8}$ $\frac{1}{2}$ $\frac{1}{4}$

B $\frac{7}{8}$ $\frac{5}{8}$ $\frac{3}{4}$ $\frac{1}{2}$ $\frac{1}{4}$

C $\frac{3}{4}$ $\frac{7}{8}$ $\frac{5}{8}$ $\frac{1}{2}$ $\frac{1}{4}$

D $\frac{7}{8}$ $\frac{3}{4}$ $\frac{1}{2}$ $\frac{5}{8}$ $\frac{1}{4}$

E $\frac{7}{8}$ $\frac{5}{8}$ $\frac{1}{2}$ $\frac{3}{4}$ $\frac{1}{4}$

36

Ava had 5 boxes.
Each box weighed 800 grams.

How many KILOGRAMS was this altogether?

A 4 kg **B** 4.5 kg **C** 40 kg **D** 4000 kg **E** 4500 kg

37

What is 3^2 ?

A 5 **B** 6 **C** 9 **D** 18 **E** 27

38

There were 27 children in a class.
There were twice as many boys as girls.

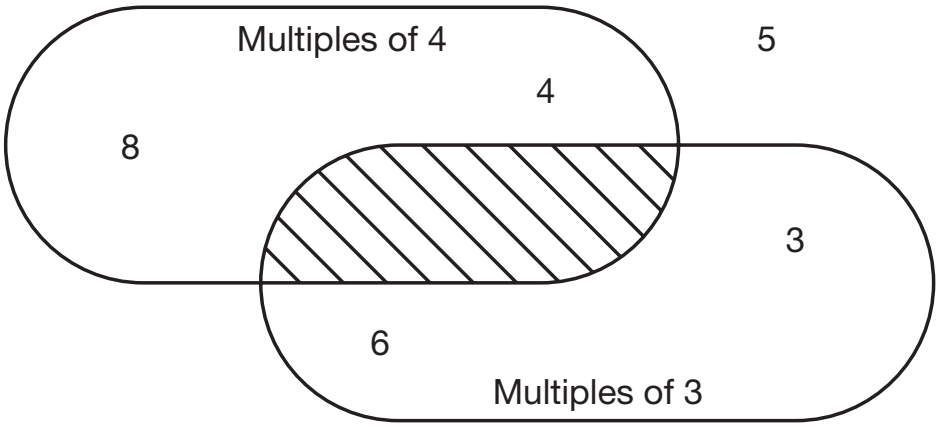
How many boys were there?

A 21 boys **B** 18 boys **C** 16 boys **D** 14 boys **E** 9 boys

39 **What is 60% of 50?**

A 5 **B** 25 **C** 27 **D** 27.5 **E** 30

40 Look at the diagram.



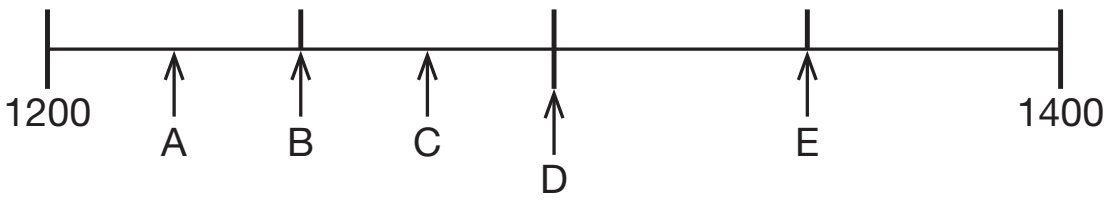
Which of the following numbers could go in the shaded section?

A 9 **B** 12 **C** 15 **D** 16 **E** 18

41 **4.06 + 0.042 = ?**

A 4.012 **B** 4.12 **C** 4.642 **D** 4.102 **E** 5.002

42 **Which letter is pointing at 1250?**



A A **B** B **C** C **D** D **E** E

43

Select the correct decimal number to go in the box.

$125 \times 5 = 625$

$12.5 \times 0.5 =$ ☐

A 6250 **B** 625.5 **C** 62.5 **D** 6.25 **E** 0.625

44

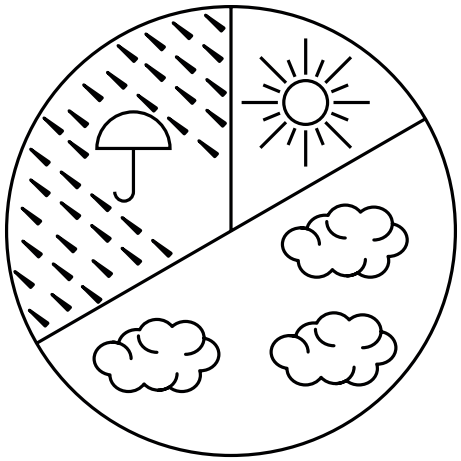
A crate holds 18 bottles.

How many crates are needed for 666 bottles?

A 36 crates **B** 37 crates **C** 38 crates **D** 47 crates **E** 48 crates

45

This chart shows the weather for 12 hours on one day.



How many hours was it dry?

A 2 hours **B** 4 hours **C** 6 hours **D** 8 hours **E** 10 hours

46

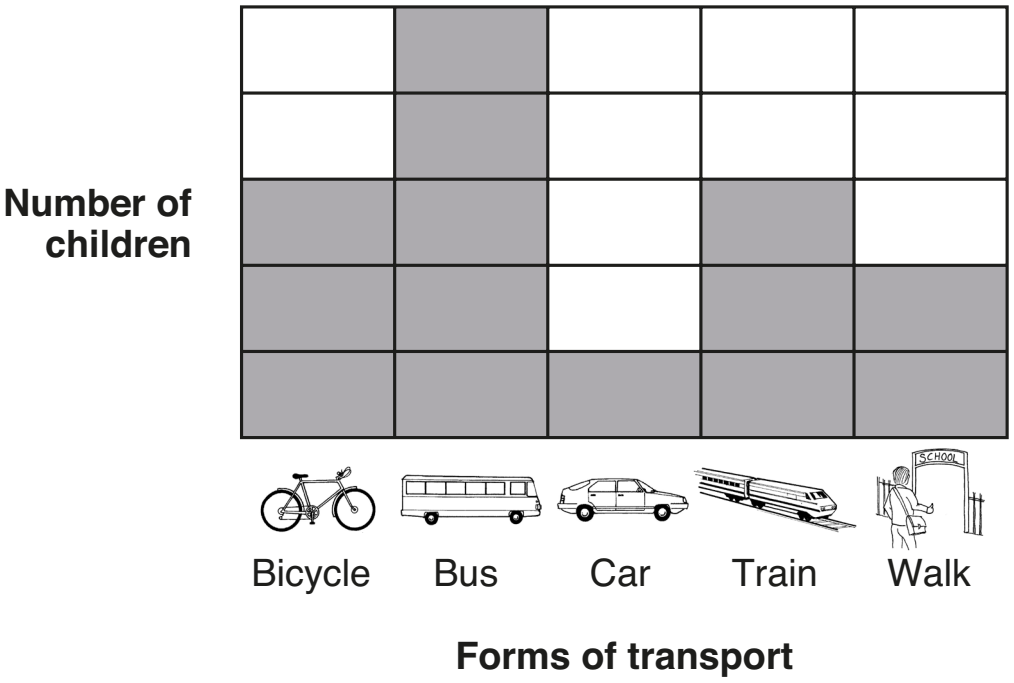
Put the correct number in the box

$27 \times 99 = 2700 - \square$

A 27 **B** 37 **C** 127 **D** 137 **E** 687

47

The chart shows the proportions of children in a class who go to school using various forms of transport.
There are no numbers along the y-axis but we know that there are 28 children in the class in total.



Which form of transport is taken by a total of 4 children?

A bicycle **B** bus **C** car **D** train **E** walk

48 The length of each edge of a cube was doubled.

How much larger did the volume become?

A 2 times **B** 3 times **C** 4 times **D** 6 times **E** 8 times

49 George plays cricket and scores a run every time he runs the length of the cricket pitch. His average score after 4 games is 23 runs. After the fifth game, his average score is 21 runs.

How many runs did he score in the fifth game?

A 12 runs **B** 13 runs **C** 14 runs **D** 15 runs **E** 16 runs

50 The coordinates of the 4 vertices of a quadrilateral are:

(a–3 , b) (a , b) (a–3 , b+2) (a , b+2)

What shape is this?

A kite
B parallelogram
C square
D rectangle
E trapezium

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