# Mathematics 2

Familiarisation

**Read the following with your child:**

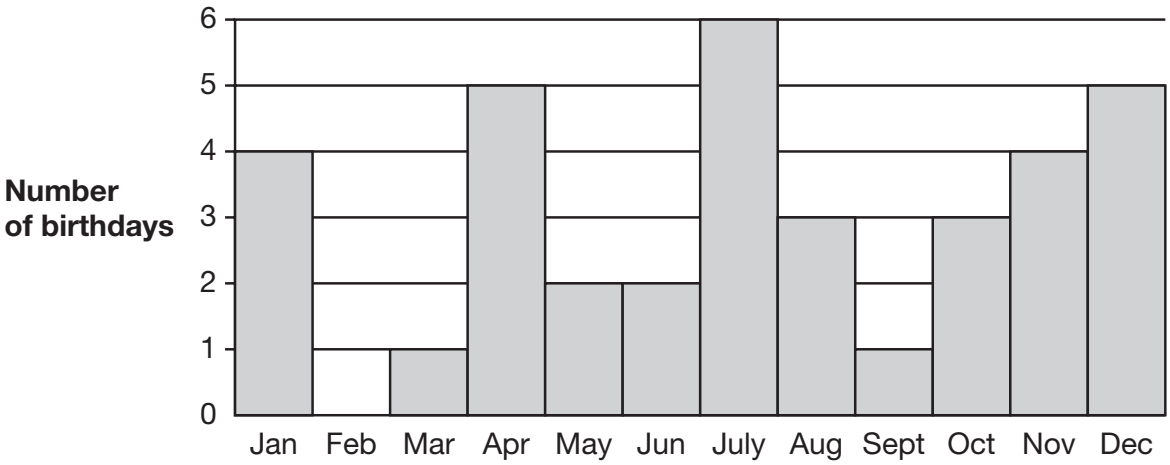
1. This is a multiple-choice paper, in which you have to mark your answer to each question on the separate answer sheet. You should mark only one answer for each question.
2. Draw a firm line clearly through the rectangle next to your answer like this . If you make a mistake, rub it out as completely 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 **How many 10p coins can I get for £1.80?**

**A** 10 coins **B** 18 coins **C** 88 coins **D** 108 coins **E** 180 coins

2




This bar chart shows during which months the children in a class have their birthdays.

**During which month are there most birthdays?**

**A** April **B** December **C** January **D** July **E** November

3 **Change the order of the figures 6085 to make the biggest number possible.**

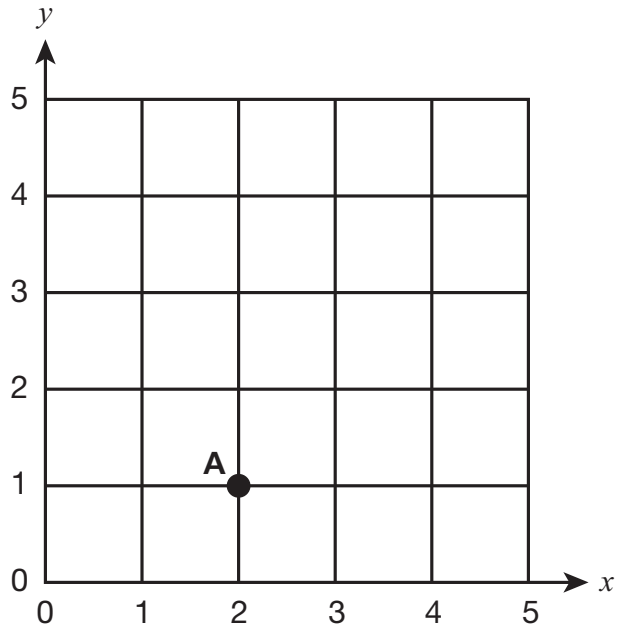
**A** 8605 **B** 6850 **C** 8650 **D** 6580 **E** 8560

4 The time in New York is 5 hours behind the time in London.
In London it is 9 am.

**What time is it in New York?**

**A** 14:00 **B** 04:00 **C** 05:00 **D** 4 pm **E** 5 pm

5




**What are the co-ordinates of A?**

**A** (1 , 2) **B** (1 , 1) **C** (2 , 0) **D** (2 , 2) **E** (2 , 1)

6

**Write this number in figures:**

eight thousand and twenty-five

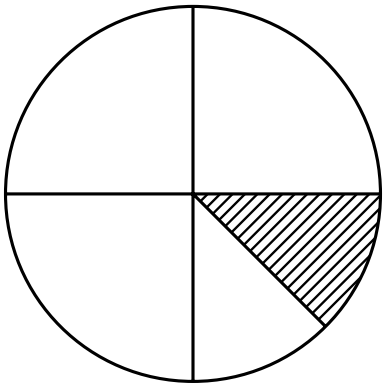
**A** 8250 **B** 80025 **C** 8205 **D** 8025 **E** 800025

7

**Share 240 into 4 equal parts.**

**A** 80 **B** 60 **C** 65 **D** 40 **E** 70

8



**What fraction of this circle is shaded?**

**A** $\frac{1}{12}$ **B** $\frac{1}{5}$ **C** $\frac{1}{4}$ **D** $\frac{1}{6}$ **E** $\frac{1}{8}$

9

**In the number 836, what does the 3 stand for?**

**A** 3 hundreds
**B** 3 ones
**C** 3 thousands
**D** 3 hundredths
**E** 3 tens

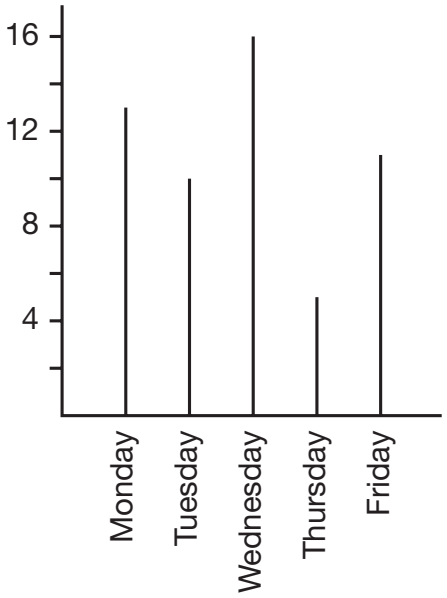
10

**What number would go in the box?**

$$\frac{3}{4} = \frac{\square}{8}$$

**A** 5 **B** 6 **C** 7 **D** 9 **E** 12

11 Sati records how many children visit the school library each day.
This is the bar chart Sati draws to show her data.




**How many children visited the library over the five days?**

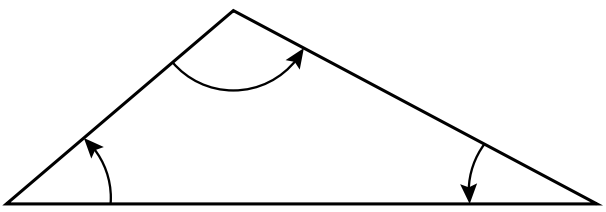
**A** 55 **B** 54 **C** 53 **D** 52 **E** 51

12 Three pieces of wood are cut from a plank 1 metre long.
Each piece is 30 cm long.

**How long is the piece left over?**

**A** 10 cm **B** 40 cm **C** 70 cm **D** 910 cm **E** 970 cm

13



**What is the sum of the interior angles of this triangle?**

**A** 90° **B** 135° **C** 180° **D** 270° **E** 360°

## 14

**27 ÷ (3 + 6) =**

**A** 15 **B** 14 **C** 13 **D** 4 **E** 3

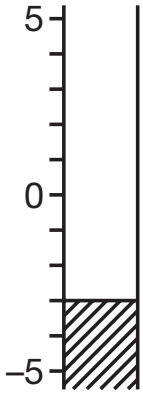
## 15

**What is the next number in this sequence?**

49 43 37 31 _____

**A** 27 **B** 21 **C** 25 **D** 23 **E** 29

## 16




The thermometer shows the temperature in Kiev.
London is 18° warmer.

**What is the temperature in London?**

**A** 17° **B** 16° **C** 15° **D** 14° **E** 13°

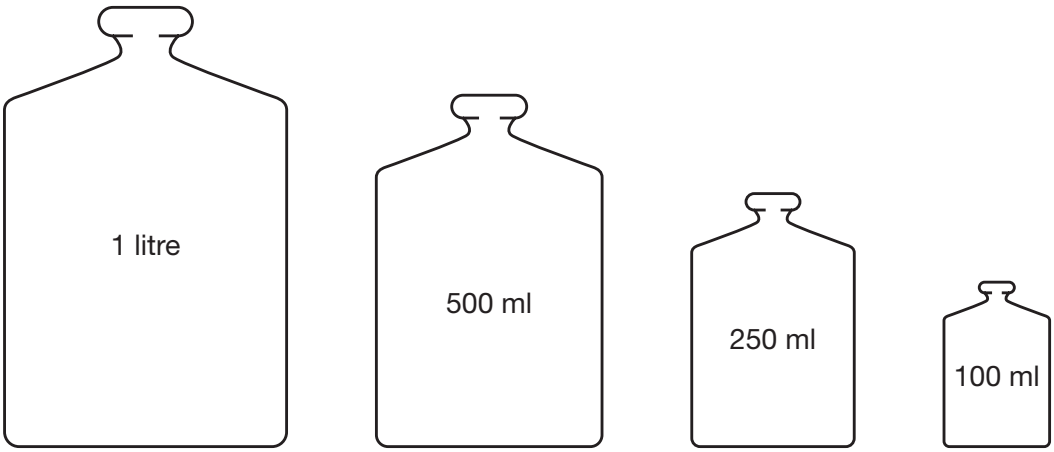
## 17

**324 ÷ 6 =**

**A** 44 **B** 54 **C** 56 **D** 58 **E** 64

## 18

Look at these bottles.




**How many times would you have to fill the 250 ml bottle to make 1 litre?**

**A** 8 times **B** 14 times **C** 4 times **D** 3 times **E** 40 times

## 19

There were 24 marbles in a bag.

I took out $\frac{1}{3}$ of the marbles.

**How many marbles did I take out?**

**A** 16 **B** 17 **C** 9 **D** 8 **E** 18

## 20

Karen wants to buy a guitar.
She has saved £43.95
The guitar costs £65.00

**How much more money does she need?**

**A** £22.05 **B** £21.05 **C** £20.05 **D** £12.05 **E** £11.05



Please go on to the next page >>>

21 **Put these numbers in order from the smallest to the biggest.**

0.525 0.7 0.35 0.175

**A** 0.7, 0.525, 0.35, 0.175
**B** 0.175, 0.525, 0.35, 0.7
**C** 0.175, 0.35, 0.525, 0.7
**D** 0.7, 0.35, 0.175, 0.525
**E** 0.175, 0.35, 0.7, 0.525

22 8 chocolate bars cost £5.20.

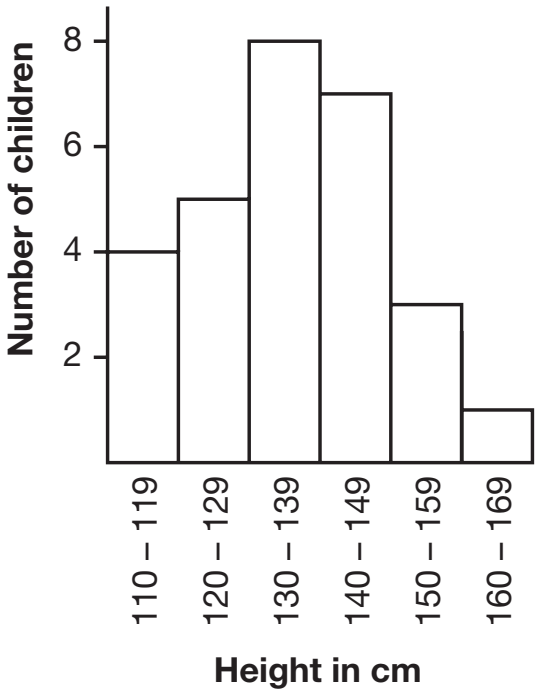
**How much do 6 chocolate bars cost?**

**A** £3.75
**B** £3.80
**C** £3.85
**D** £3.90
**E** £3.95

23 **What is 50% of 40?**

**A** 16 **B** 20 **C** 25 **D** 8 **E** 18

24 The bar chart shows the heights of a class of pupils.




**Which statement MUST be true?**

**A** 1 child is exactly 165 cm tall.
**B** 5 children have a height between 120 cm and 129 cm.
**C** No children have a height less than 111 cm.
**D** 7 children have a height more than 140 cm but less than 150 cm.
**E** 8 children have a height of less than 139 cm.

25 A television programme finished at 4.55 pm.
It lasted for three-quarters of an hour.

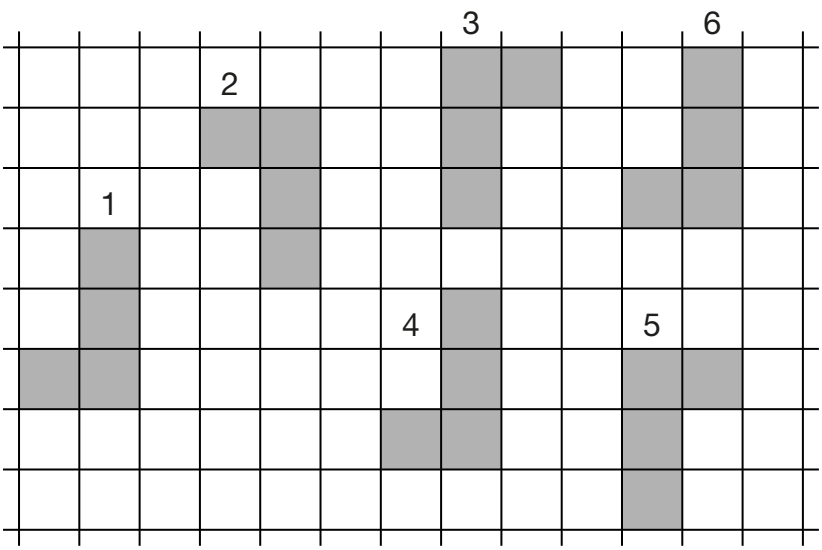
**At what time did it start?**

**A** 4.15 pm **B** 4.10 pm **C** 4.05 pm **D** 4.25 pm **E** 4.20 pm


Please go on to the next page >>>

## 26

**Which of these moves is not a translation?**




**A** 3 → 5 **B** 4 → 1 **C** 6 → 4 **D** 5 → 2 **E** 1 → 6

## 27

Zoey has a large carpet in her room.
It is 5 metres long and 4 metres wide.

**What is the distance all around the edge of the carpet?**

**A** 14 m **B** 16 m **C** 18 m **D** 19 m **E** 20 m

## 28

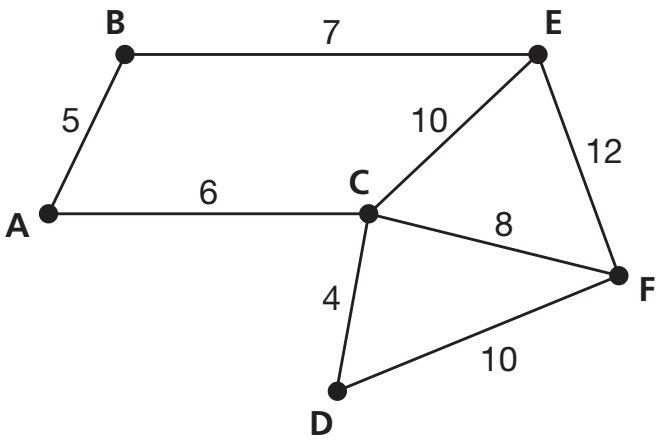
Ella paid £780 per month in rent.

**How much rent did she pay in 12 months?**

**A** £2340 **B** £8360 **C** £8580 **D** £9260 **E** £9360

## 29

The diagram shows the distance in kilometres between some towns.
Sophia drove at a speed of 60 kilometres per hour for 20 minutes.




**Which of the following routes shows how far Sophia travelled?**

**A** ABEF **B** ACDF **C** ACEF **D** ACFD **E** ABEC

## 30

An empty box weighs 150 grams.
When it is filled with paper it weighs 1 kilogram.

**How much does the paper weigh?**

**A** 350 g **B** 750 g **C** 850 g **D** 950 g **E** 9850 g

## 31

Look at the table of pocket money.

| Name | Pocket money |
|---|---|
| Seema | £10.00 |
| Mariam | £5.00 |
| Charlie | £6.00 |
| Xavier | £4.00 |
| Jamie | £6.00 |
| Lucas | £7.00 |
| Gabriella | £4.00 |

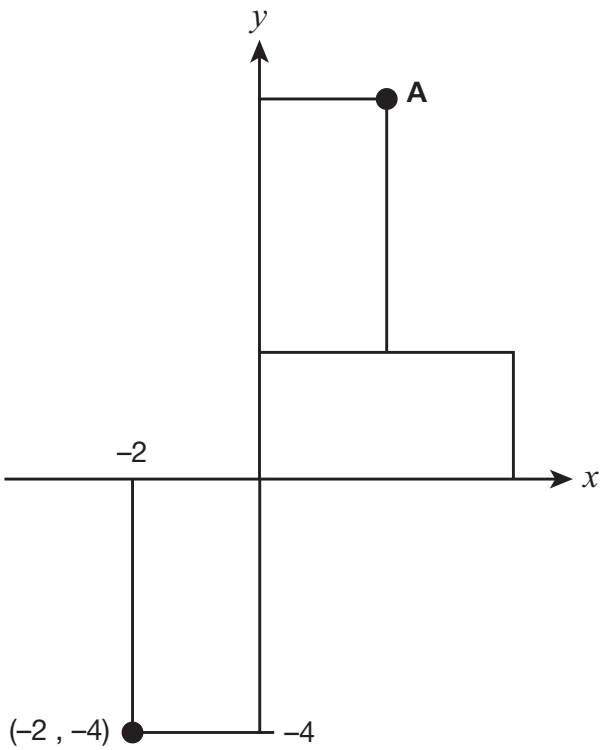
**What is the average amount of pocket money?**

**A** £4.00 **B** £5.00 **C** £6.00 **D** £7.00 **E** £7.50



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32 Three identical rectangles are drawn.




**What are the co-ordinates of A?**

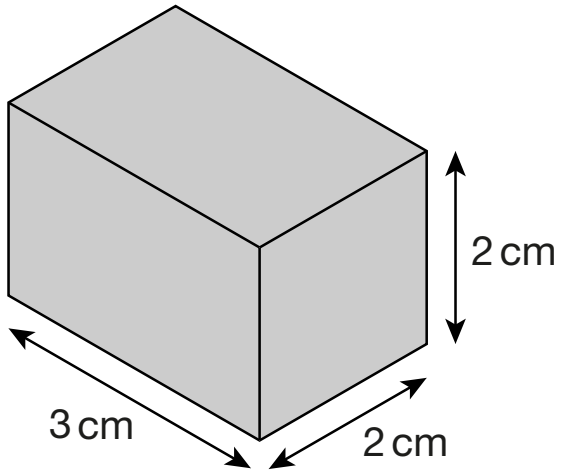
**A** (4 , 6) **B** (2 , 4) **C** (6 , 2) **D** (2 , 6) **E** (4 , 8)

33 $3a = 36$

**$2a =$** ☐

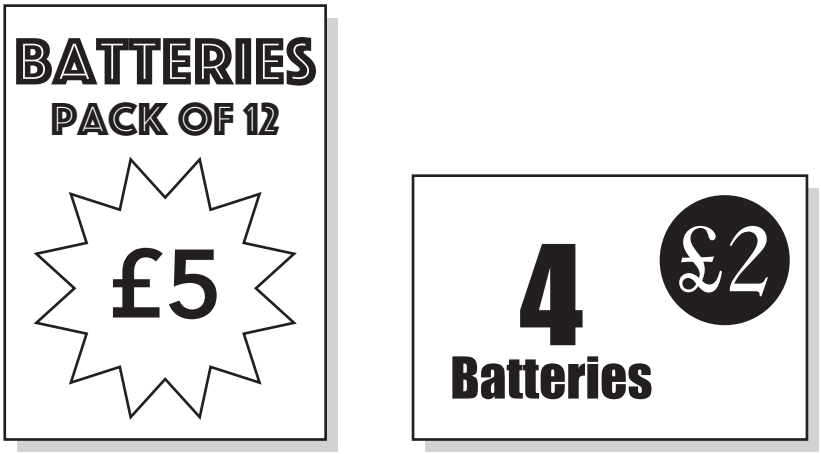
**A** 12 **B** 18 **C** 24 **D** 26 **E** 28

34 **What is the volume of this block?**




**A** 12 $cm^3$ **B** 16 $cm^3$ **C** 18 $cm^3$ **D** 36 $cm^3$ **E** 48 $cm^3$

35 I buy 1 large pack of batteries for £5 and 2 small packs priced at £2 per pack.



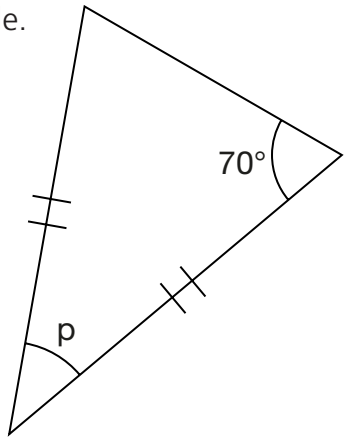

**What is the average cost of a battery across the 3 packs?**

**A** 34p **B** 48p **C** 45p **D** 38p **E** 35p

36 **0.02 + 7.8 =**

**A** 7.802 **B** 7.82 **C** 7.822 **D** 8.00 **E** 7.102

37 This is an isosceles triangle.




**What is the size of the angle labelled p?**

**A** 30° **B** 40° **C** 55° **D** 70° **E** 110°

38 Muhammed must get up at 07.30 hours.
He goes to bed at 22.38 hours the night before.

**How long does he spend in bed?**

**A** 8 hours 22 minutes
**B** 8 hours 42 minutes
**C** 8 hours 52 minutes
**D** 9 hours 42 minutes
**E** 9 hours 52 minutes

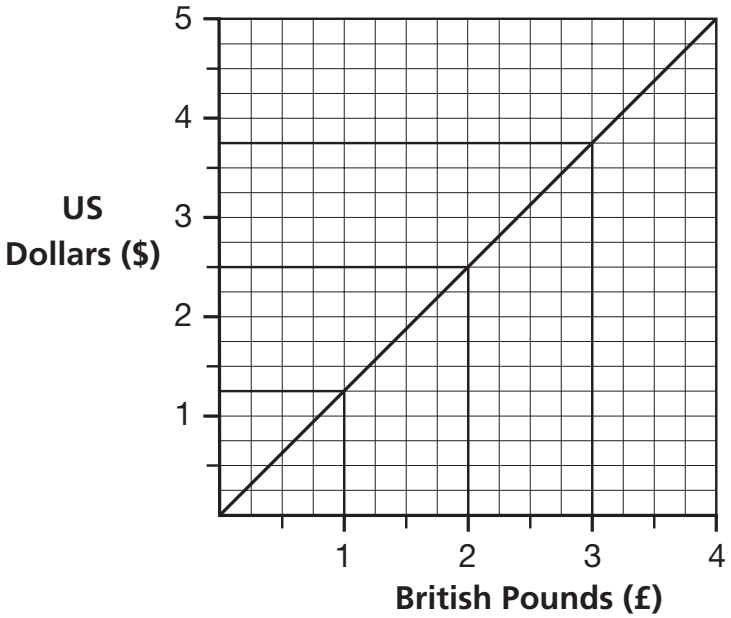
39 Liam carried ten parcels.
Each parcel weighed 250 grams.

**How many KILOGRAMS was this altogether?**

**A** 25 kg **B** 2.50 kg **C** 2.25 kg **D** 0.25 kg **E** 0.025 kg

## 40

This graph converts British Pounds (£) to United States Dollars ($).




**How many Dollars ($) is £34?**

**A** $42.50 **B** $47.50 **C** $45 **D** $42.05 **E** $27.20

## 41

**What is 19.706 correct to 2 decimal places?**

**A** 19.72 **B** 19.70 **C** 19.76 **D** 19.80 **E** 19.71

## 42

A packet of biscuits costs *x* pence.
I buy 6 packets.

**Which expression shows how much change I will get from £5?**

**A** $5 - 6x$ **B** $500 - 6x$ **C** $6x - 5$ **D** $500 - 60x$ **E** $6x - 500$

## 43

The end points of five lines are shown in the answer options below.




**Which line is parallel to the line in the diagram?**

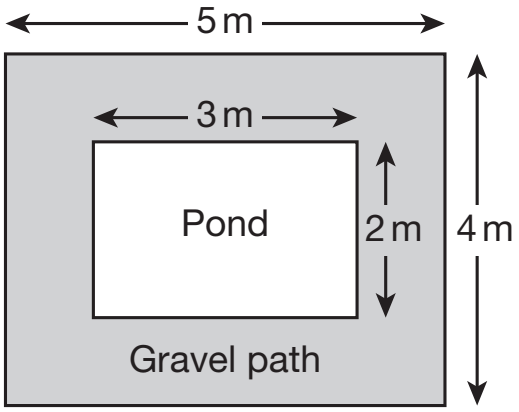
**A** (3 , 1) and (1 , 4)
**B** (2 , 6) and (4 , 3)
**C** (5 , 1) and (1 , 5)
**D** (2 , 5) and (4 , 2)
**E** (5 , 2) and (1 , 6)

## 44

A gravel path 1 metre wide is put around a pond.

1 bag will cover $\frac{1}{2}$ m$^2$. Each bag of gravel costs £4.99.

.




**What is the approximate cost of the path?**

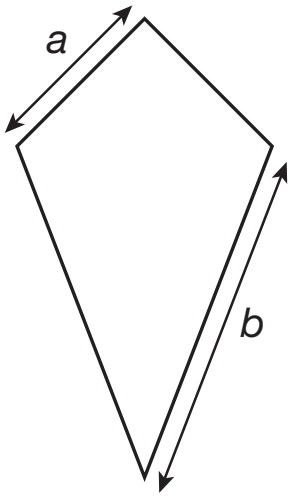
**A** £200 **B** £35 **C** £60 **D** £70 **E** £140

## 45

**What is 1.7 as a fraction?**

**A** $\frac{17}{10}$ **B** $\frac{1}{17}$ **C** $\frac{10}{17}$ **D** $\frac{17}{100}$ **E** $\frac{17}{11}$

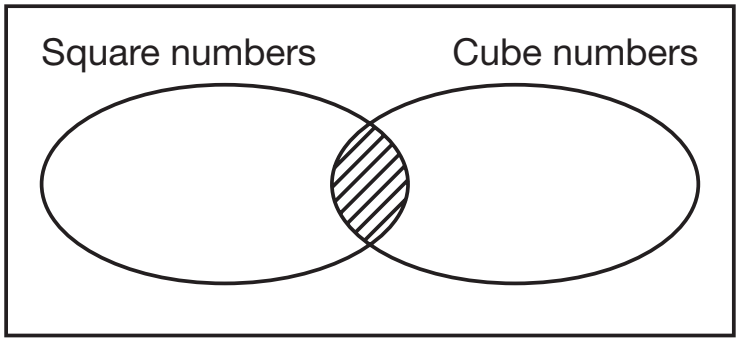
## 46




**What is the formula for the perimeter of this kite?**

**A** $a + b$ **B** $2a + 2b$ **C** $a \times b$ **D** $2a + b$ **E** $2a \times 2b$

## 47




**Which number is in the shaded part of the Venn diagram?**

**A** 36 **B** 64 **C** 81 **D** 100 **E** 125



Please go on to the next page >>>

## 48

Adrian's garden measures 10 m by 6 m.

Paving stones measure $\frac{1}{2}$ m by $\frac{1}{2}$ m.

**How many paving stones does he need to pave his garden?**

**A** 180 **B** 240 **C** 15 **D** 30 **E** 120

## 49

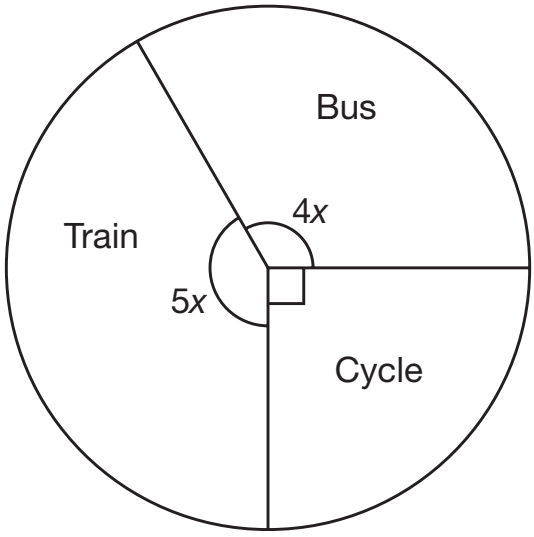
**What is the mean of these expressions?**

$3x - 1$ $5x + 6$ $4x + 1$

**A** $12x + 6$ **B** $6x + 3$ **C** $4x + 2$ **D** $5x + 4$ **E** $3x + 5$

## 50

This pie chart shows how children travel to school on one day.




135 children cycle to school on that day.

**How many travel by bus on that day?**

**A** 45 children
**B** 120 children
**C** 150 children
**D** 180 children
**E** 210 children

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Published by GL Assessment, 1st Floor, Vantage London, Great West Road, Brentford TW8 9AG.

Printed in Great Britain.

Code 6853 917
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