Mathematics 2

Familiarisation

Read the following with your child:

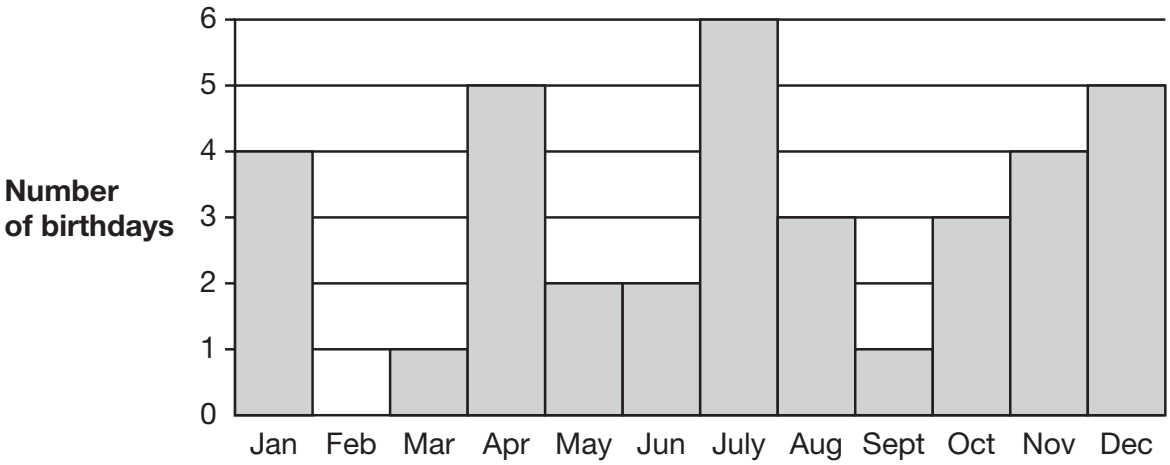
1. This is a multiple-choice paper, in which you have to mark your answer to each question on the separate answer sheet. You should mark only one answer for each question.
2. Draw a firm line clearly through the rectangle next to your answer like this . If you make a mistake, rub it out as completely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

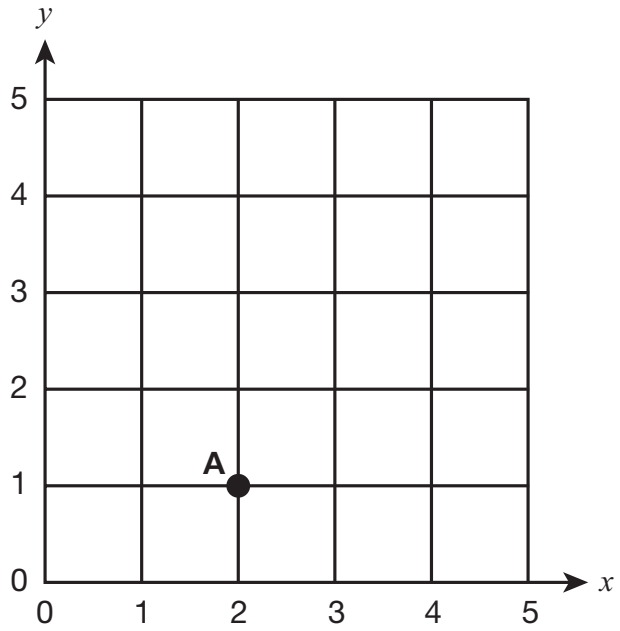
A 8605 **B** 6850 **C** 8650 **D** 6580 **E** 8560

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 coordinates 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

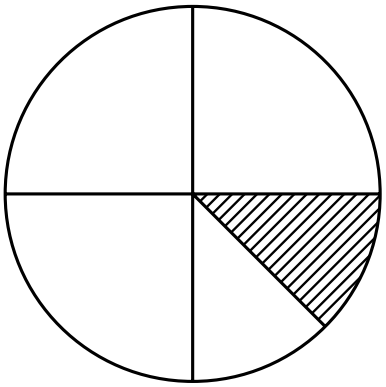
7

Share 240 into 4 equal parts.

How much is one part?

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

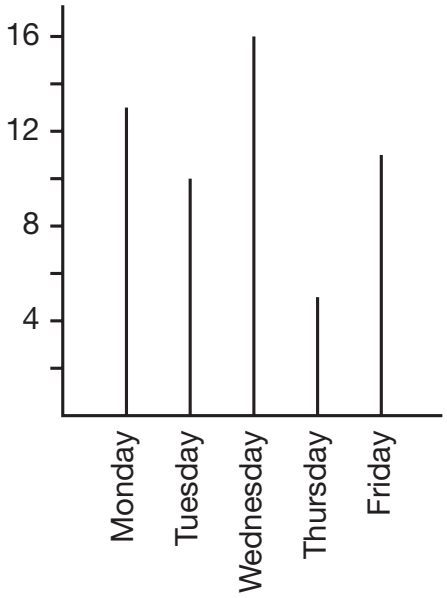
What number would go in the box?

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

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

Please go on to the next page >>>

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

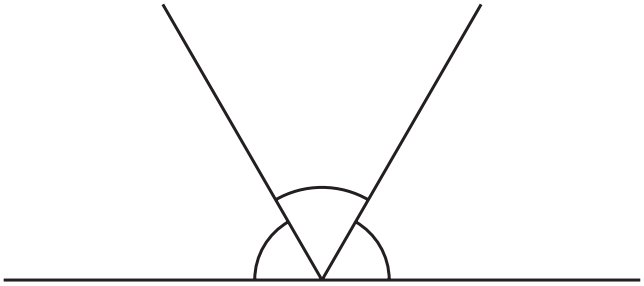
12 Three pieces of wood are cut from a plank 1 metre long.
Each piece is 30 cm long.

How long is the piece left over?

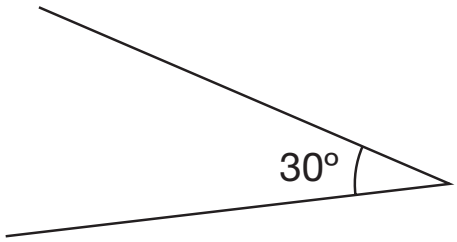
A 10 cm **B** 40 cm **C** 70 cm **D** 910 cm **E** 970 cm

13

These three angles fit together to make a straight line:



Look at the angle below.



How many of these 30° angles will fit together to make a straight line?

A 3 **B** 4 **C** 5 **D** 6 **E** 7

14

Callum is thinking of a two-digit number.
Its digits add up to 5.
It is a prime number.
Its square is a three-digit number.

What number is he thinking of?

A 31 **B** 14 **C** 23 **D** 13 **E** 41

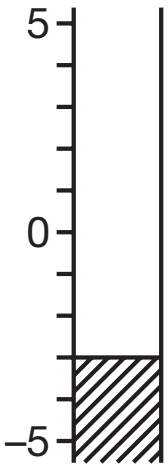
15

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° C warmer.

What is the temperature in London?

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

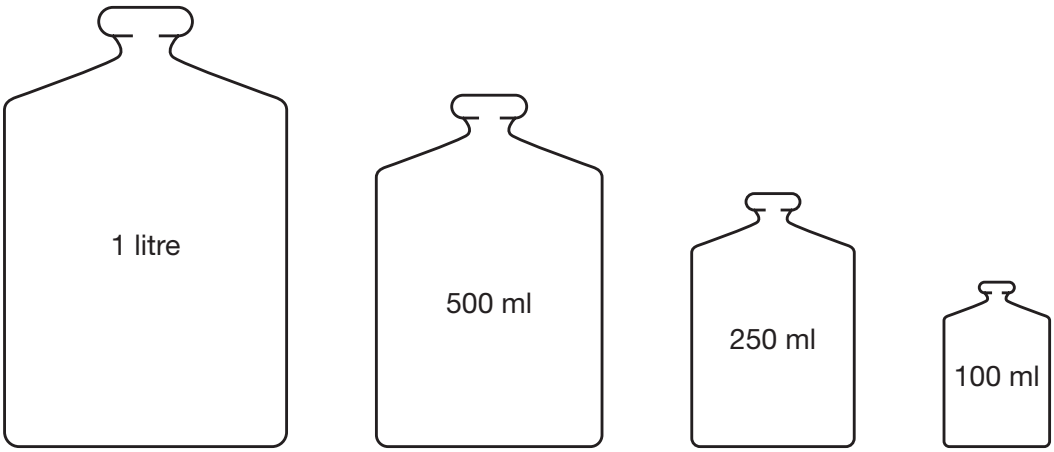
17

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

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?

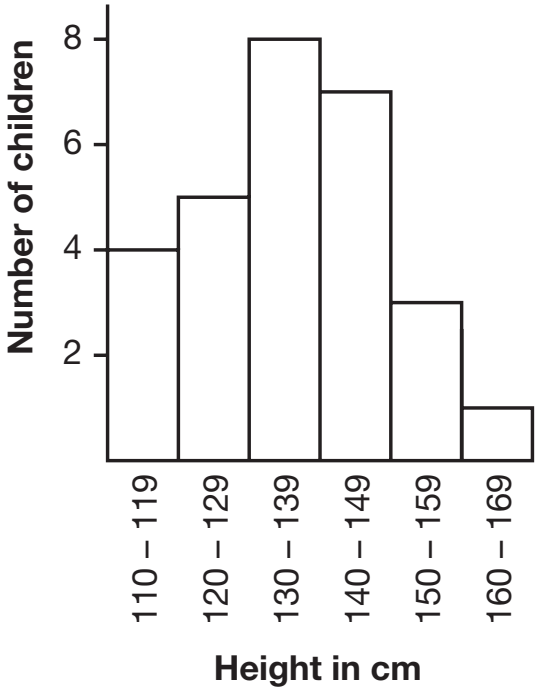
A £3.75
B £3.80
C £3.85
D £3.90
E £3.95

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

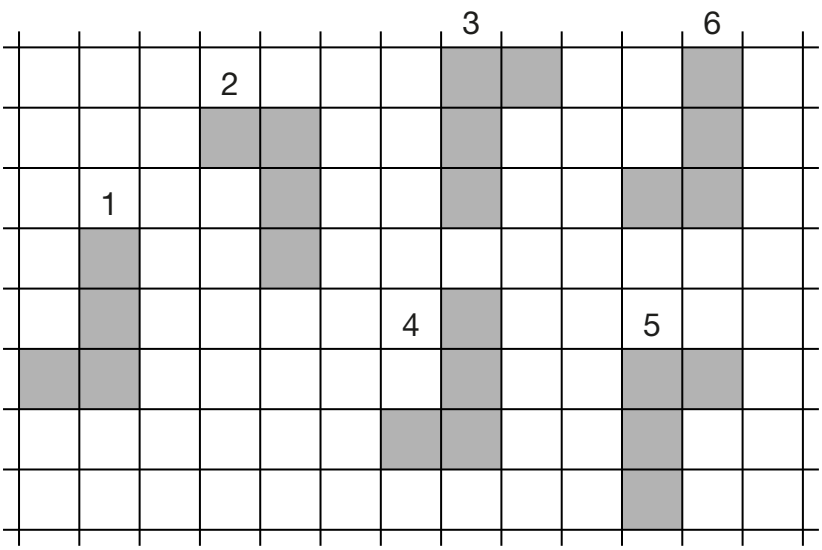
A television programme finished at 4.55 pm.
It lasted for three-quarters of an hour.

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

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

Jenny is wallpapering her bedroom.
She starts with a 6 metre roll but has to cut off 1.75 metres because it is damaged.

If she needs 33.75 metres of wallpaper in total, how many more rolls of 6 metres must she buy?

A 8 **B** 7 **C** 6 **D** 5 **E** 4

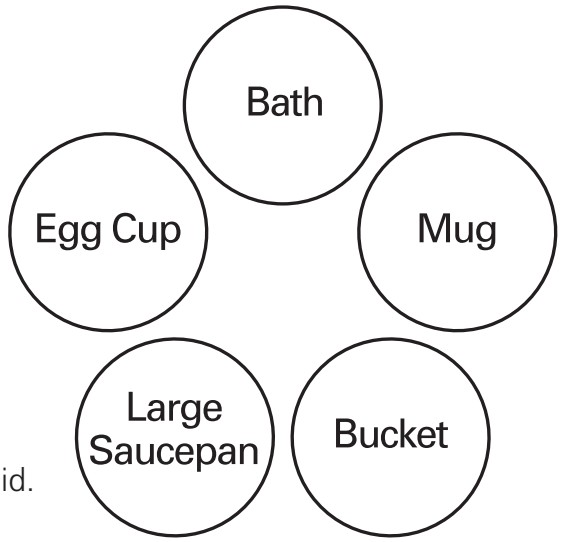
30

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



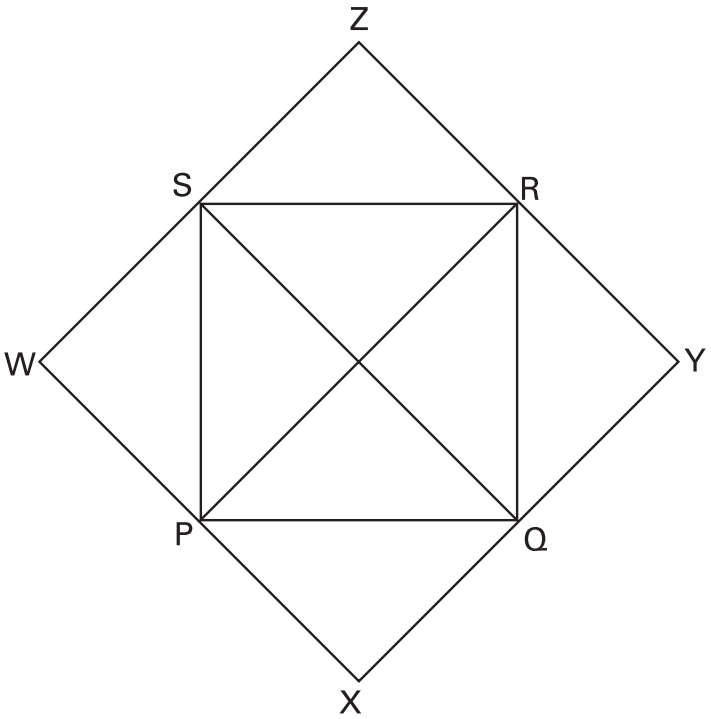
Mrs Shaw has 175 ml of liquid.
She needs a container for it.

Which one suits her needs best?

A Bath
B Mug
C Large saucepan
D Egg cup
E Bucket

32

The vertices of the two squares below are labelled with letters.



Which of the following lines is perpendicular to the line connecting P and R?

A the line connecting X and Y
B the line connecting P and S
C the line connecting Q and S
D the line connecting S and W
E the line connecting Q and R

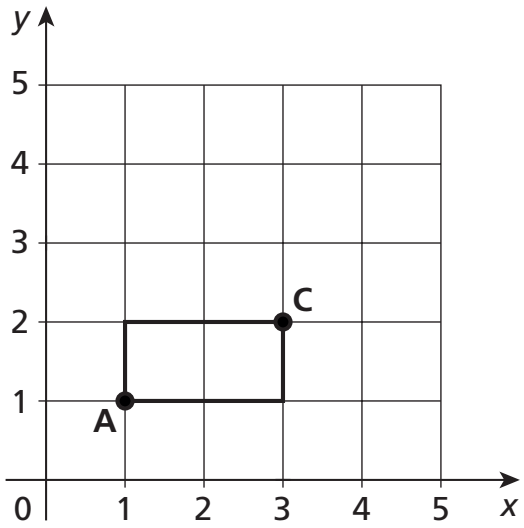
33

If X stands for a whole number and 3 lots of X are equal to 36, what are 2 lots of X equal to?

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

34

A rectangle is drawn with corner A at (1 , 1).
All sides of the rectangle are then doubled in length.

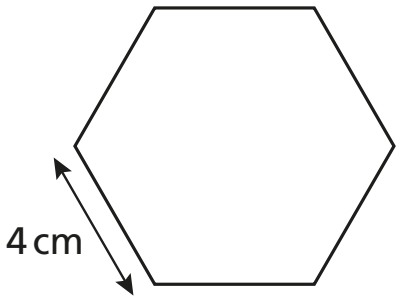


The new rectangle is drawn with A again at (1 , 1).

Where will corner C now be drawn?

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

35



Which of these statements is NOT true for this regular hexagon?

A There are 6 equal sides.
B There are 6 equal angles.
C The perimeter is 24 cm.
D There are 6 lines of symmetry.
E There is only 1 pair of parallel sides.

36

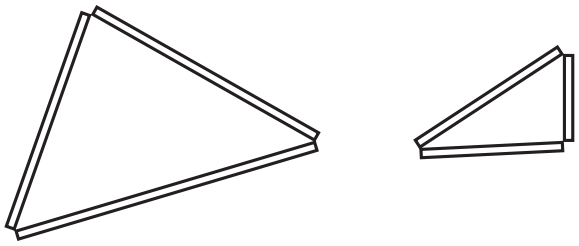
0.02 + 7.8 =

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

37

Emily has six sticks.
Their lengths are:
3 cm 5 cm 6 cm 8 cm 9 cm 11 cm

Emily can lay the sticks end to end to make triangles, like this:



Emily wants to make the smallest triangle she can using the 11 cm stick

Which two other lengths of stick should she use?

A 3 cm and 5 cm
B 3 cm and 6 cm
C 5 cm and 6 cm
D 5 cm and 8 cm
E 6 cm and 8 cm

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

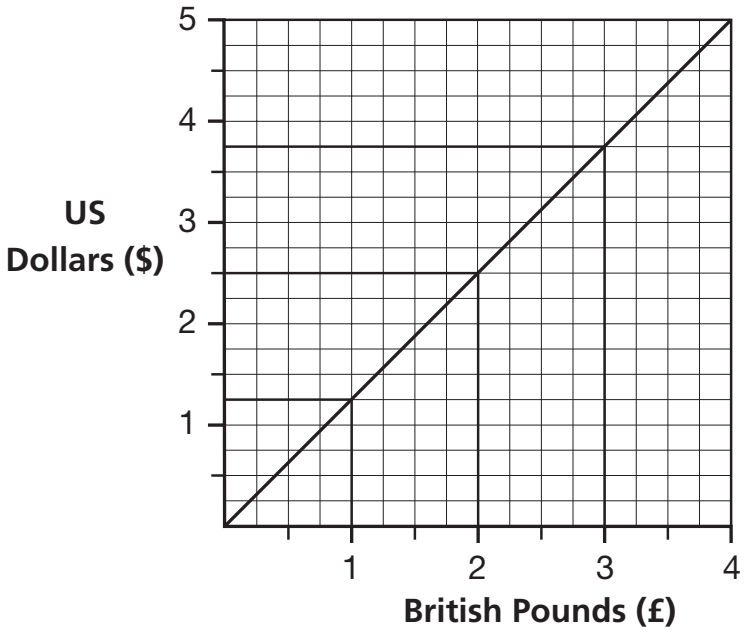
Liam carried ten parcels.
Each parcel weighed 250 grams.

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

Please go on to the next page >>>

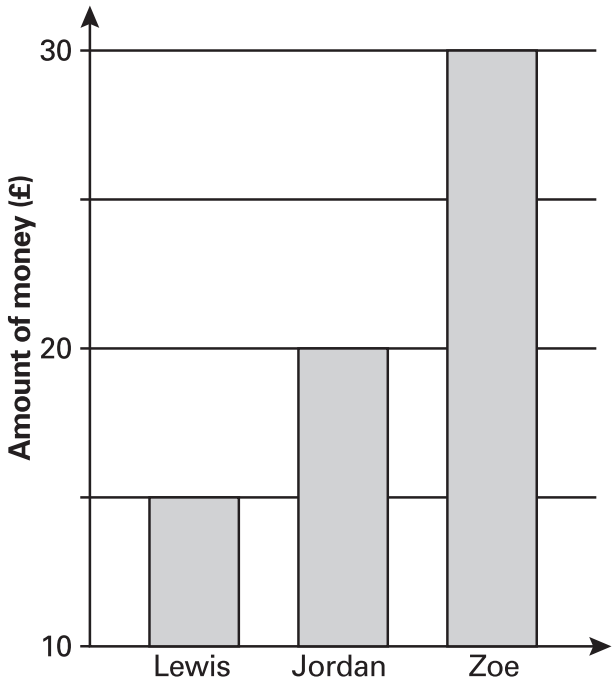
41

To add up all the angles inside a polygon, you subtract 2 from the number of sides and multiply this by 180.
An octagon has 8 sides.

What do the angles inside an octagon add up to?

A 1438 degrees
B 1086 degrees
C 186 degrees
D 1080 degrees
E 1806 degrees

42



The bar chart shows the amount of money Lewis, Jordan and Zoe have in their savings accounts.

Which one of these is NOT true?

A Lewis and Jordan have £35 altogether.
B Lewis has half as much as Jordan.
C The children have £65 altogether.
D Zoe has twice as much as Lewis.
E Jordan has £10 less than Zoe.

43

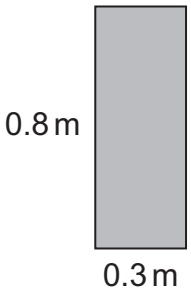
The end points of five lines are shown in the answer options below.

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

What is the area of this rectangle?



A 0.24 cm^2
B 2.4 cm^2
C 24 cm^2
D 240 cm^2
E 2400 cm^2

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

Greg thinks of a number, multiplies it by 3, subtracts 5 and then multiplies by 2. His answer is 26.

What number did Greg think of?

A 9 **B** 8 **C** 7 **D** 6 **E** 5

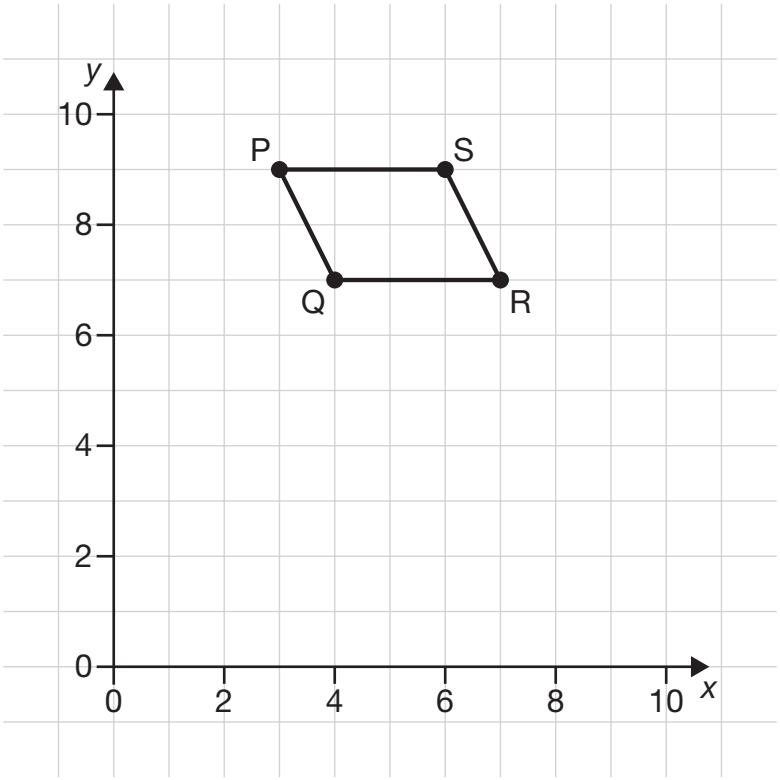
47

Henry says that to change from kilometres to miles you divide the number of kilometres by 8 and then multiply by 5.

Which of these is NOT correct?

A 168 kilometres is 105 miles.
B 248 kilometres is 155 miles.
C 192 kilometres is 125 miles.
D 216 kilometres is 135 miles.
E 264 kilometres is 165 miles.

48 A shape, PQRS is shown on a coordinate grid.



Following a reflection, the position of point S in the reflected shape is (6 , 1).

In what line is the shape reflected?

A A horizontal line that passes through the *y*-axis at (0 , 6)
B A vertical line that passes through the *x*-axis at (5 , 0)
C A horizontal line that passes through the *y*-axis at (0 , 5)
D A horizontal line that passes through the *y*-axis at (0 , 4)
E A vertical line that passes through the *x*-axis at (6 , 0)

49 The area of a rectangular playground is 210 metres squared.

Which of the following could be the playground's perimeter?

A 44 metres
B 52 metres
C 64 metres
D 72 metres
E 74 metres

50 **$4^3 \times 4 \times 3^2$ is NOT the same as which of the following?**

A $9 \times 8^2 \times 4$
B $3^2 \times 4^2 \times 4^2$
C $4^3 \times 6^2$
D $6 \times 12 \times 16$
E 36×64

Copyright © GL Assessment, 2021.

All rights reserved, including translation. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, recording or duplication in any information storage and retrieval system, without permission in writing from the publishers.

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

Printed in Great Britain.

Code 6853 917
2(08.21) PF