

# Year 7 mathematics test

## Paper 1

Calculator **not** allowed

Please read this page, but do not open your booklet until your teacher tells you to start. Write your name and the name of your school in the spaces below.

First name \_\_\_\_\_

Last name \_\_\_\_\_

School \_\_\_\_\_

### Remember

- The test is 45 minutes long.
- You **must not** use a calculator for any question in this test.
- You will need: pen, pencil, rubber, ruler and tracing paper (optional).
- This test starts with easier questions.
- Try to answer all the questions.
- Write all your answers and working on the test paper – do not use any rough paper. Marks may be awarded for working.
- Check your work carefully.
- Ask your teacher if you are not sure what to do.

For marker's  
use only

Total marks

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## Instructions

### Answers



This means write down your answer or show your working and write down your answer.

### Calculators



You **must not** use a calculator to answer any question in this test.

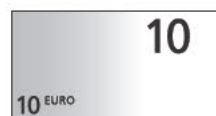
1

Write the total amounts.

The first one is done for you.

Total amount: 35 euros

Total amount: \_\_\_\_\_ euros

1 mark

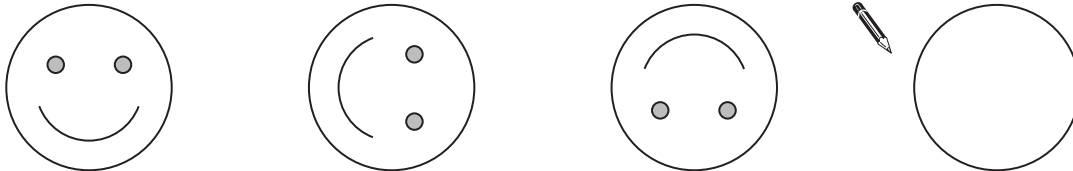
Total amount: \_\_\_\_\_ euros

1 mark

2 The diagram shows a rotating face.

The face rotates clockwise through one right angle each time.

Complete the last face.



1 mark

3 Nisha writes:

$$538 + 46 = 585$$

Show why Nisha is **wrong**.



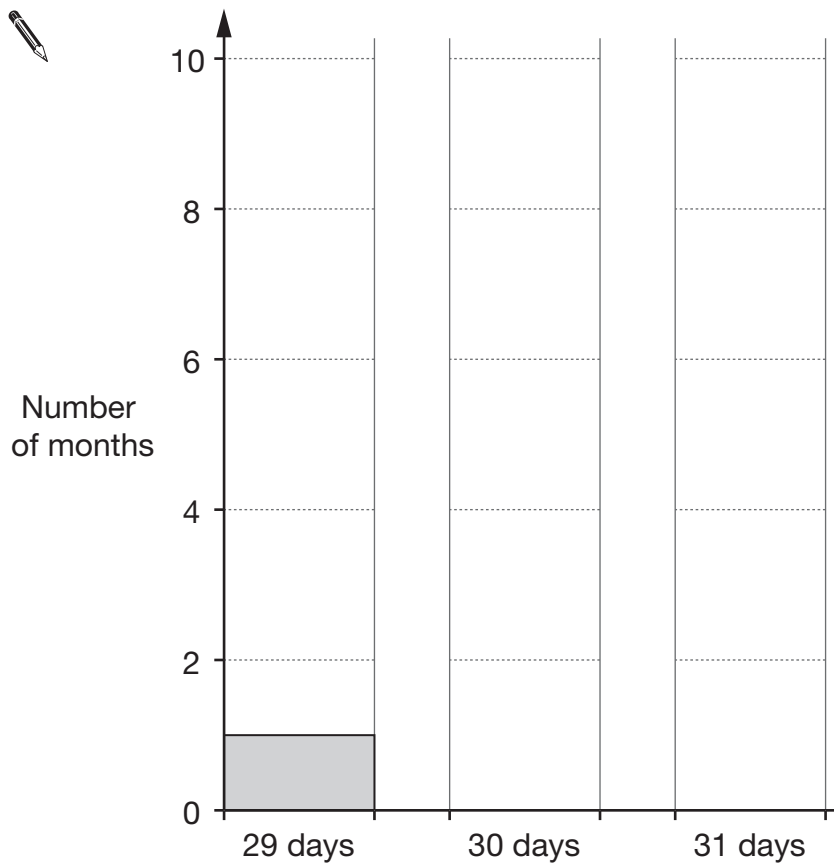
1 mark

4

In a leap year:

1 month has 29 days  
 4 months have 30 days  
 7 months have 31 days

Complete the bar chart to show this information.



\_\_\_\_\_

\_\_\_\_\_


2 marks



5 (a) Write the missing numbers in the boxes.

The first one is done for you.

$$\boxed{98} \xrightarrow{+1} \boxed{99}$$


  $\boxed{98} \xrightarrow{+10} \boxed{\phantom{00}}$

$$\boxed{98} \xrightarrow{+100} \boxed{\phantom{00}}$$

$$\boxed{98} \xrightarrow{+1000} \boxed{\phantom{00}}$$

\_\_\_\_\_  
2 marks

(b) Now write the missing number in the box below.

  $\boxed{98} \xrightarrow{\times 10} \boxed{\phantom{00}}$

\_\_\_\_\_  
1 mark

6 (a) Buses leave Ashtown every **15 minutes**.



Write the missing time in the timetable below.

|         |       |       |       |       |
|---------|-------|-------|-------|-------|
| Ashtown | 09 25 | 09 40 | 09 55 | _____ |
|---------|-------|-------|-------|-------|

1 mark

(b) Trains leave Ashtown every **20 minutes**.



Write the missing time in the timetable below.

|         |       |       |       |       |
|---------|-------|-------|-------|-------|
| Ashtown | _____ | 13 15 | 13 35 | 13 55 |
|---------|-------|-------|-------|-------|

1 mark



7

Every day Mrs Patel buys one newspaper.

The newspapers cost more on Saturdays and Sundays than on weekdays.



Saturday  
£1



Sunday  
£1.20



Monday to Friday  
50p each day

In **one week**, what is the total cost of her newspapers?



£

1 mark



8

Look at these numbers.

|   |                |   |                 |    |                 |
|---|----------------|---|-----------------|----|-----------------|
| 5 | $7\frac{1}{2}$ | 9 | $12\frac{1}{2}$ | 17 | $22\frac{1}{2}$ |
|---|----------------|---|-----------------|----|-----------------|

(a) Which two of these numbers **add up to 20**?

|  |  |
|--|--|
|  |  |
|--|--|

1 mark

(b) Which two of these numbers have a **difference of 10**?


|  |  |
|--|--|
|  |  |
|--|--|

1 mark



9


Write the missing numbers in these multiplication grids.



|   |    |       |
|---|----|-------|
| × | 3  | 5     |
| 6 | 18 | 30    |
| 4 | 12 | _____ |

\_\_\_\_\_

1 mark

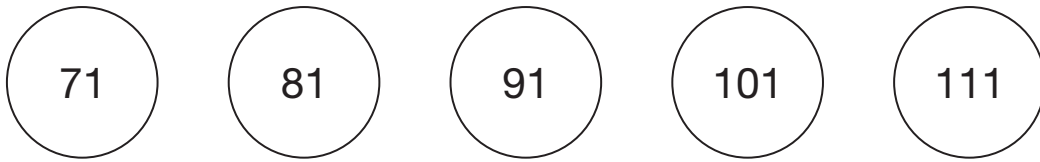


|       |       |       |
|-------|-------|-------|
| ×     | _____ | _____ |
| _____ | 24    | 15    |
| _____ | 16    | 10    |

\_\_\_\_\_

2 marks

10

This sequence of numbers **goes up** in **10s**.(a) A different sequence of numbers **goes up** in **40s**.

Write the missing numbers in this sequence.

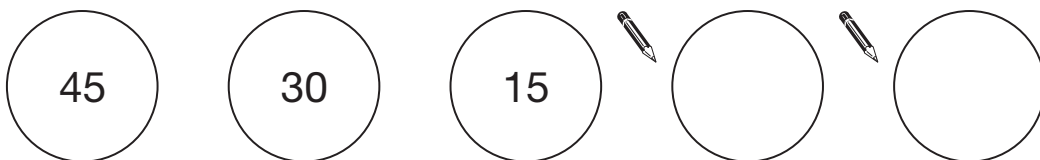


1 mark

1 mark

(b) Another sequence of numbers **goes down** in **15s**.

Write the missing numbers in this sequence.



1 mark

1 mark



11

The table shows information about 10 plants.

| Plant | Colour of flowers | Height of plant (cm) |
|-------|-------------------|----------------------|
| A     | pink              | 70                   |
| B     | red               | 120                  |
| C     | pink              | 60                   |
| D     | red               | 110                  |
| E     | blue              | 80                   |
| F     | white             | 40                   |
| G     | pink              | 50                   |
| H     | white             | 60                   |
| I     | pink              | 80                   |
| J     | white             | 60                   |

(a) What is the **most common** height of the plants?



\_\_\_\_\_ cm

1 mark

(b) How many of the plants have **pink** flowers and are **less than 70cm** in height?



\_\_\_\_\_

1 mark

(c) The tallest plant is **greater than 1 metre** in height.

How many centimetres greater?



\_\_\_\_\_ cm

1 mark

12

Write a number in each box to make the calculations correct.

The first one is done for you.

$$3 + 11 = 4 + \boxed{10}$$



$$15 + 8 = 5 + \boxed{\phantom{00}}$$

1 mark

$$40 - 10 = 50 - \boxed{\phantom{00}}$$

1 mark

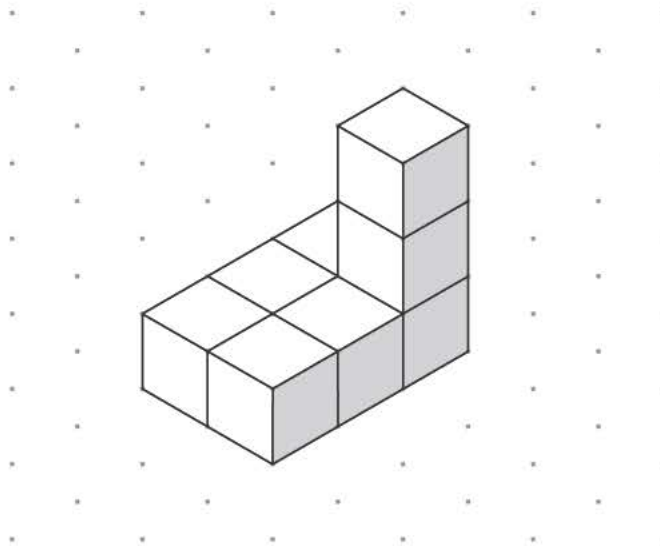
$$30 \div 3 = 300 \div \boxed{\phantom{00}}$$

1 mark

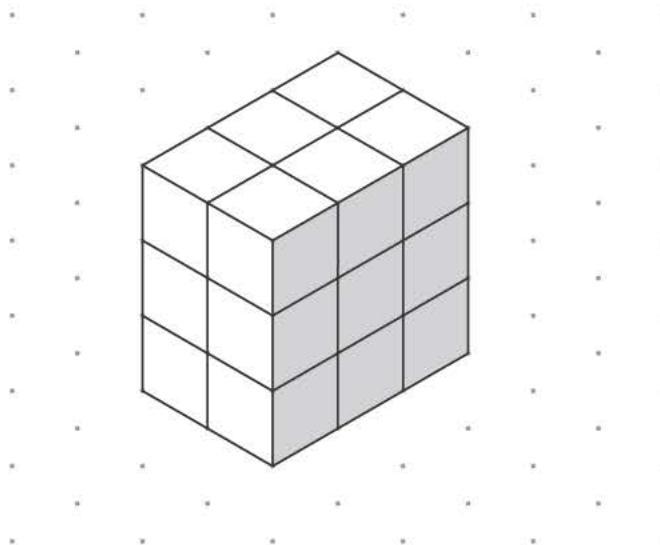


13

Sam uses 8 cubes to make this shape.



He adds more cubes to make this cuboid.



How many **more** cubes does he add to make this cuboid?



\_\_\_\_\_

1 mark

14

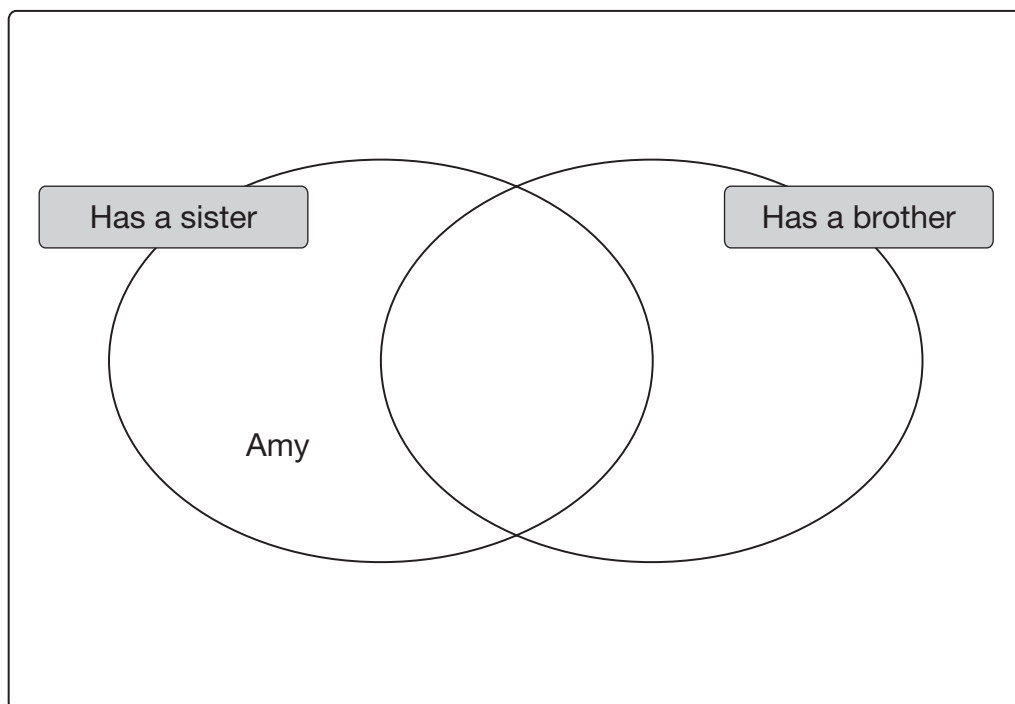
Ali asked four people:

Do you have a sister?  
Do you have a brother?

The answers are shown in the table below.

|      | Has a sister | Has a brother |
|------|--------------|---------------|
| Amy  | Yes          | No            |
| John | No           | Yes           |
| Gill | Yes          | Yes           |
| Fred | No           | No            |

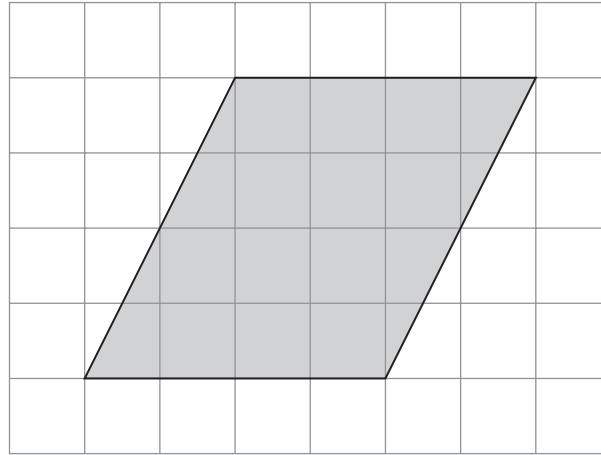
Write the names John, Gill and Fred in the correct places on the diagram below.



\_\_\_\_\_  
\_\_\_\_\_  
2 marks



15 Look at the shaded shape on the square grid.



For each statement below, tick (✓) to show if it is True or False.



|   | True                     | False                    |
|---|--------------------------|--------------------------|
| The shaded shape is a quadrilateral.              | <input type="checkbox"/> | <input type="checkbox"/> |
| The shaded shape has four equal sides.            | <input type="checkbox"/> | <input type="checkbox"/> |
| The shaded shape has four equal angles.           | <input type="checkbox"/> | <input type="checkbox"/> |
| The shaded shape has two pairs of parallel sides. | <input type="checkbox"/> | <input type="checkbox"/> |

\_\_\_\_\_

\_\_\_\_\_ 2 marks



16

Write the missing numbers.



$$\frac{1}{5} \text{ of } 20 = \square$$

---

1 mark





$$\frac{3}{4} \text{ of } 20 = \square$$

---

1 mark

17

A café sells coffee and toast.

|   |  |
|---|--|
| <br>1 cup of coffee<br><br>1 slice of toast<br>Cost £1.30 | <br>1 cup of coffee<br><br>2 slices of toast<br>Cost £1.70 |
|---|--|

How much does **1 cup of coffee** cost?

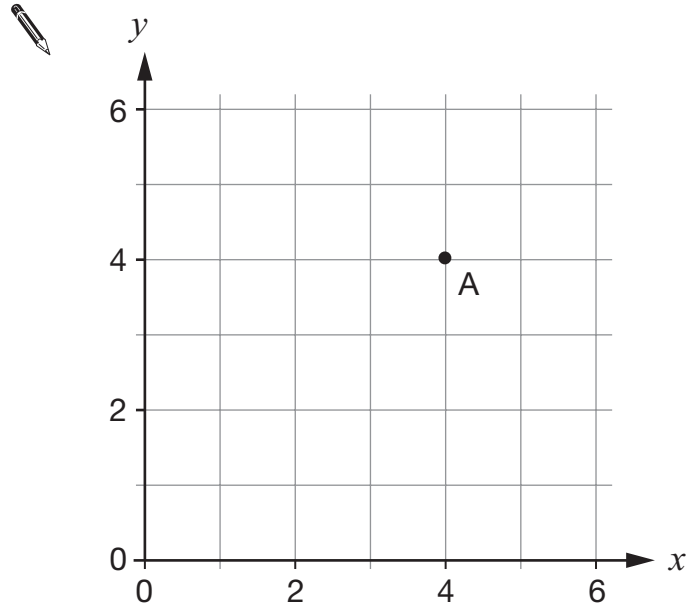
\_\_\_\_\_ p

1 mark

18

Point A is marked on the grid.

The coordinates of A are (4, 4)



1 mark

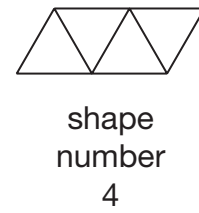
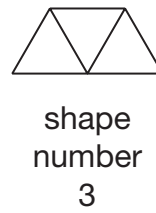
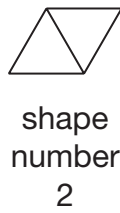
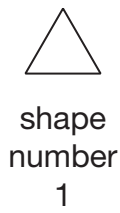
Mark **one point** on the grid that has:

an  $x$  coordinate that is **equal to 4**, and  
a  $y$  coordinate that is **greater than 4**



19

Jo places equilateral triangles in straight lines to make this sequence.



(a) Which word below describes **shape number 3**? Put a ring round it.



parallelogram

rhombus

pentagon

trapezium

1 mark

(b) Look at the table below.

| Shape number | Perimeter |
|--------------|-----------|
| 1            | 3cm       |
| 2            | 4cm       |
| 3            | 5cm       |
| 4            | 6cm       |

Jo makes **shape number 15**

What is the **perimeter** of shape number 15?

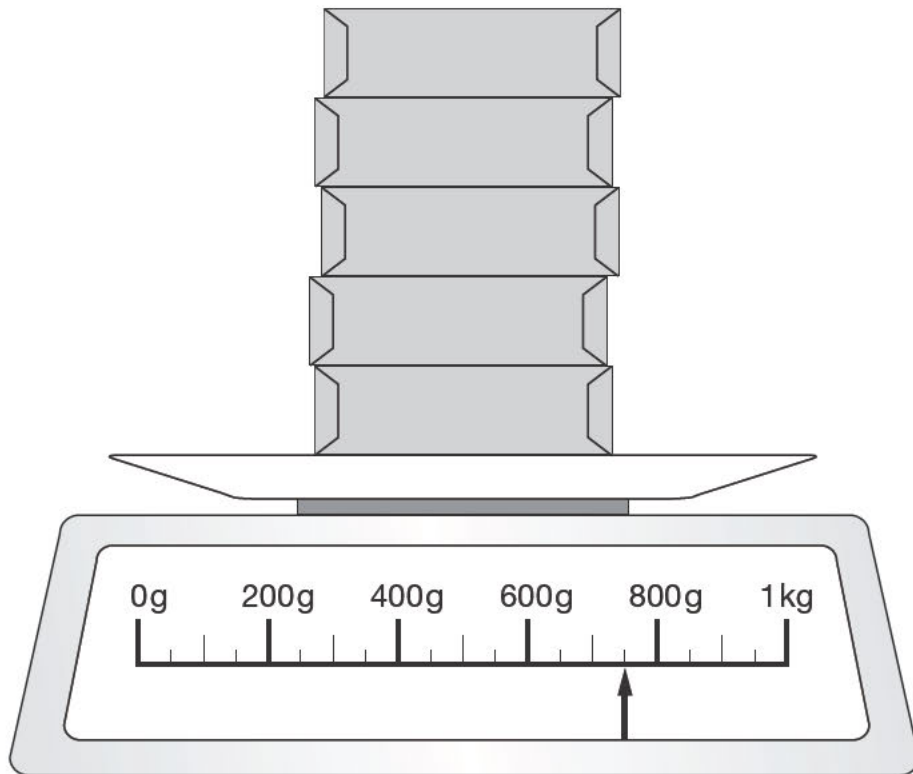


\_\_\_\_\_ cm

1 mark

20

Look at the diagram.



The scale shows how much **five** parcels weigh.

All the parcels weigh the **same**.

How much does **one** parcel weigh?



\_\_\_\_\_ g

2 marks



**END OF TEST**

**END OF TEST**

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