

## Year 6 Practice National Curriculum tests

# Set A

# Mathematics

## Paper 2: reasoning

First Name						
Middle Name						
Last Name						
Date of Birth	Day		Month		Year	

Created by [mathsframe.co.uk](https://mathsframe.co.uk).

Visit for hundreds of interactive maths games and worksheets linked to the new curriculum.

Total Marks (out of 35)	
----------------------------	--

# Instructions

You **may not** use a calculator to answer any questions in this test.

## Questions and answers

You have **40 minutes** to complete this test.

Follow the instructions for each question.

Work as quickly and carefully as you can.

If you need to do working out, you can use the space around the question.

**Some questions have a method box like this:**

The diagram shows a large grid of red lines. On the left side of the grid, there is a rounded rectangular box containing the text "Show your method". On the right side of the grid, there is a smaller, empty rectangular box.

For these question, you may get a mark for showing your method.

If you cannot do a question, **go on to the next one**. You can come back to it later, if you have time.

If you finish before the end, **go back and check your work**.

## Marks

The number under each box at the side of the page tells you the maximum number of marks for each question.

1 Tim has these coins.



How much more money does Tim need to make exactly £1?

Sarah has **ten** 2p coins and **twenty** 10p coins

1 mark

How much money does she have altogether?

1 mark

2

A four million, ninety-seven thousand, seven hundred and eighty-two

B 4,102,246

C seven hundred and fifty-four thousand, eight hundred and twelve

D 24,134

E 732,105

Put these numbers in order starting with the **smallest**.

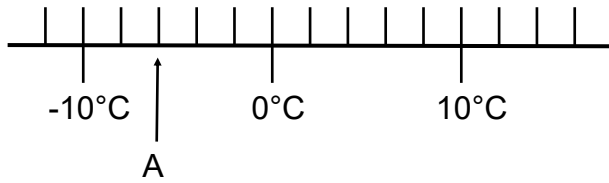
One has been done for you.

smallest

largest

1 mark

3 Here is part of a temperature scale.



What is the temperature shown at A?

1 mark

What temperature is 10°C higher than A?

1 mark

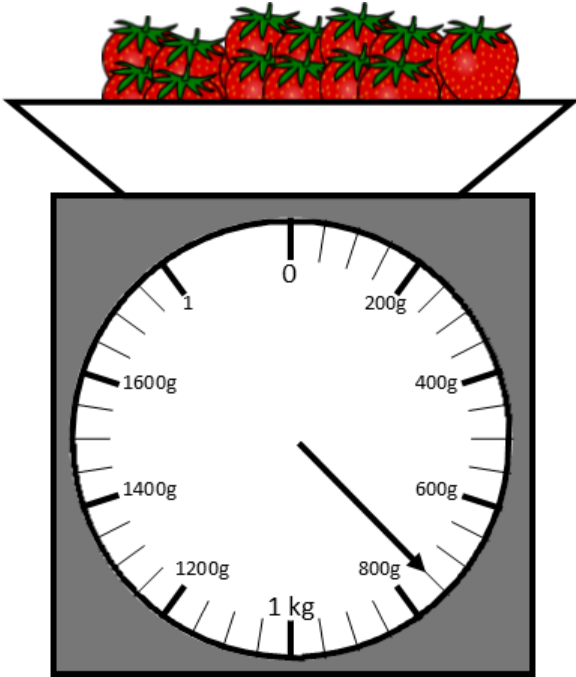
4

Write in the missing digits to make this **addition** correct.

$$\begin{array}{r} 3 \quad \square \quad 5 \\ + \quad 5 \quad 7 \quad \square \\ \hline \square \quad 3 \quad 9 \end{array}$$

2 marks

5 Monty is making strawberry jam. He needs **1.2 kg** of strawberries.



How many more grams of strawberries does he need?

grams

1 mark

6 Eve is selling cup cakes at the school fete.  
She sells them for 65p each.



She makes a total of £7.80

How many cup cakes does she sell?

1 mark

7

Circle the two numbers which add together to equal 0.16

0.1

0.6

0.06

0.15

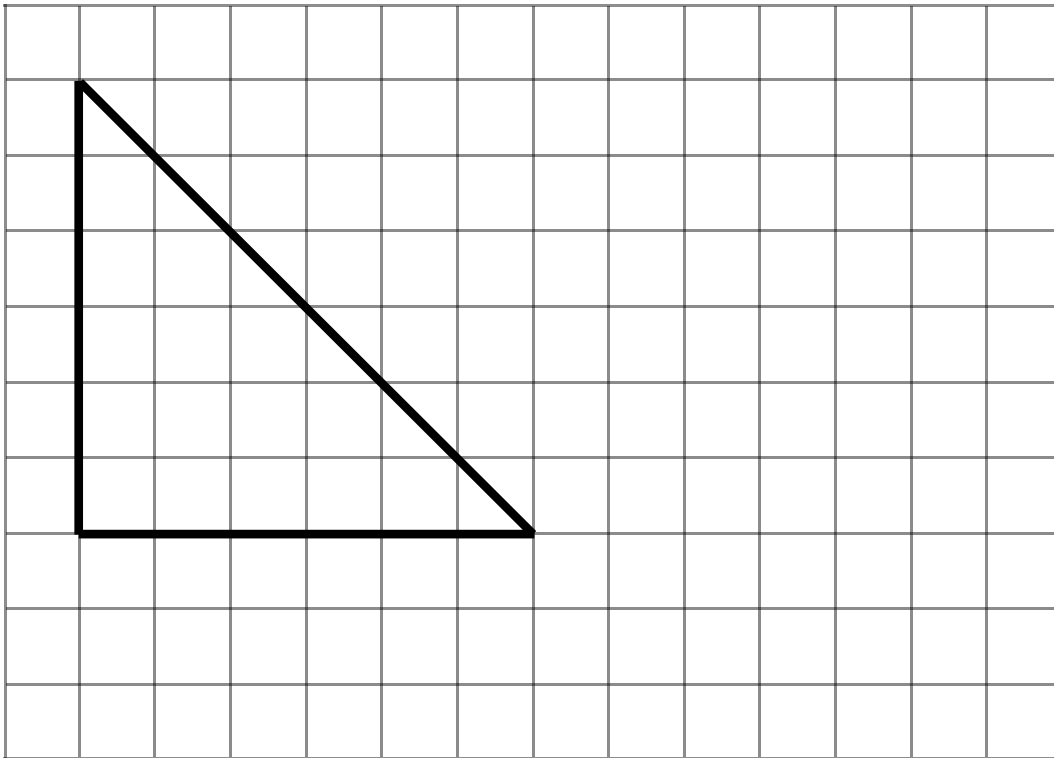
1 mark

8

Here is a triangle drawn on a square grid.

Draw a **rectangle** on the grid with the same area as the triangle.

Use a ruler.



1 mark







13 To hire a taxi it costs:

**£3 for every journey plus £1.50 per kilometre travelled**



How much would it cost to travel 10km?

1 mark

Adam spends £9 on a taxi journey.

How far does he travel?

1 mark

14 What percentage of this shape is shaded?



1 mark

15 Write the missing number.

$$\frac{3}{5} \text{ of } \boxed{\phantom{000}} = 18$$

1 mark

16

Write the number which is three less than four million.

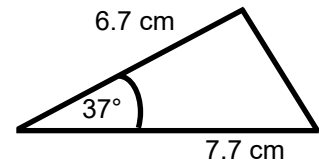
1 mark

Write the number which is twenty thousand less than one million.

1 mark

17

Here is a sketch of a triangle. It is not drawn to scale.



Draw the full size triangle accurately, below.

Use an angle measurer (protractor) and a ruler.

One line has been done for you.



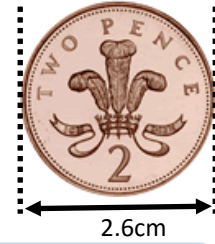
2 marks



20

A 2p coin has a diameter of 2.6cm.

Marcus made a straight line of 2p coins worth £1.40.



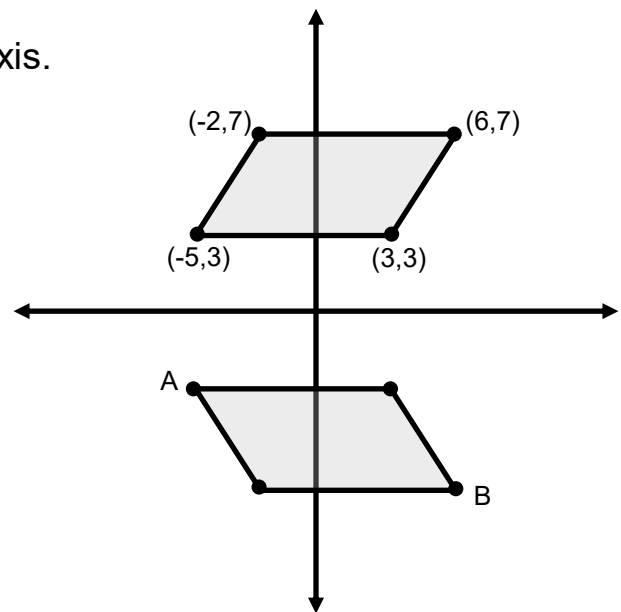
How long was the line of coins? Give your answer in meters.

Show your method

2 marks

21

A parallelogram is reflected in the x-axis.



Write the coordinates of the points A and B.

$$A = ( \quad , \quad )$$

1 mark

$$B = ( \quad , \quad )$$

1 mark