

National curriculum tests

Key stage 2

Practice Paper: Reasoning R5

First name						
Middle name						
Last name						
Date of birth	Day		Month		Year	
School name						



Key Stage 2 National Curriculum Tests - Practice Paper - Reasoning

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 as carefully as you can.

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

Do not write over any barcodes.

Some questions have a method box like this:

Show your method

--

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

If you cannot do one of the questions, 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 line at the side of the page tells you the maximum number of marks for each question.

One is done for you.

is 40 more than

→ 216

2

5 children each take 7 sheets

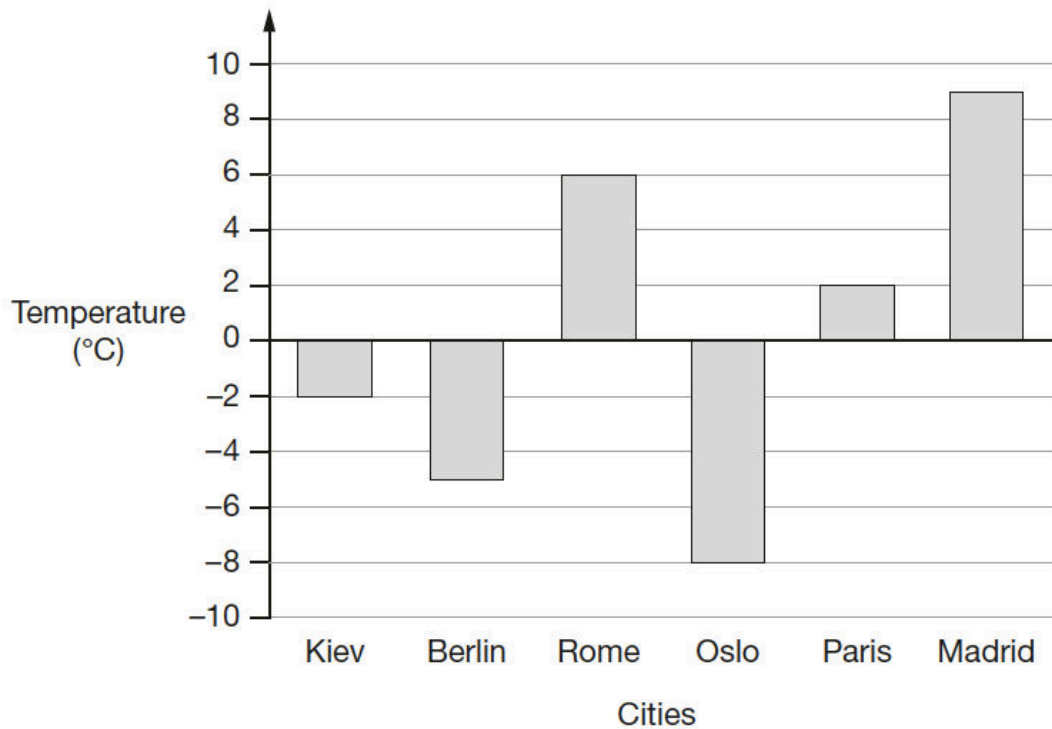
Show
your
method

A blank sheet of graph paper with a light blue grid pattern. The grid consists of small squares. On the right side of the page, there is a rectangular box with a thick black border, which is currently empty. This box likely serves as a space for students to draw or write their answers.

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3

This graph shows the temperature in six cities on a day in January.



Which city was 11 degrees **warmer** than **Kiev**?

 1 mark

What was the **difference** between the temperature in **Kiev** and the temperature in **Paris**?

°C

 1 mark

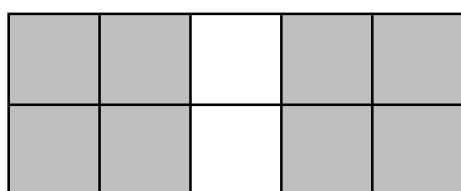
4

Here are some shapes made of squares.

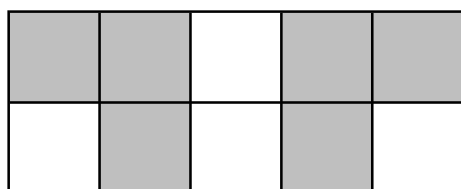
A fraction of each shape is shaded.

Match each shape to its equivalent fraction.

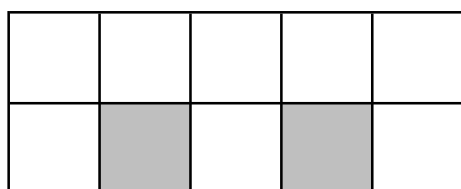
One has been done for you.



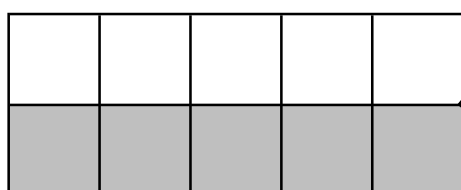
$$\frac{6}{10}$$



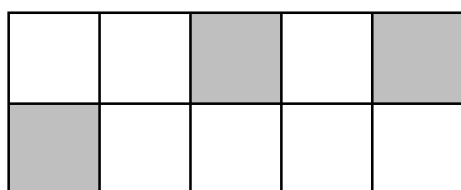
$$\frac{4}{5}$$



$$\frac{1}{2}$$



$$\frac{3}{10}$$



$$\frac{1}{5}$$

2 marks

R5

5

What is **432** minutes in hours and minutes?

hours

minutes

1 mark

6

Bill's watch shows five minutes past nine.

The watch is twenty minutes fast



What is the correct time?

1 mark

7

In the squares, write a multiple that belongs to each set.

One has been done for you.

numbers from 1 to 99

multiple of 20

40

numbers from 101 to 199

multiple of 40

numbers from 201 to 299

multiple of 10

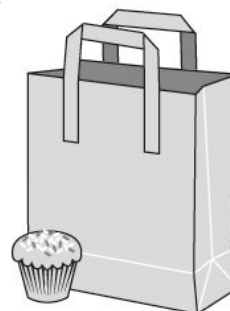
numbers from 301 to 399

multiple of 30

2 marks

8 Amber bakes cakes and sells them in bags.

She uses this formula to work out how much to charge for one bag of cakes.



$$\text{Cost} = \text{number of cakes} \times 22 \text{ p} + 15 \text{ p for the bag}$$

How much will a bag of 20 cakes cost?

£

1 mark

Paul buys a bag of cakes for £3.45

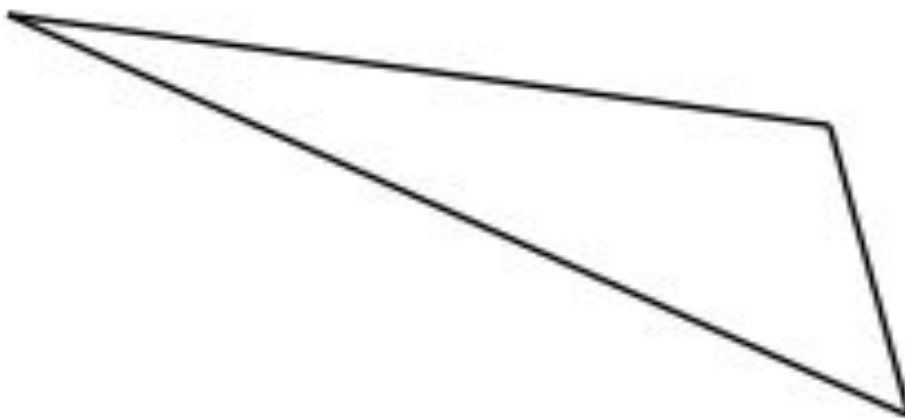
Use the formula to calculate how many cakes are in the bag.

Show
your
method

cakes

2 marks

9 Here is a triangle.



Measure the shortest side accurately, in centimetres.

	cm
--	----

1 mark

Measure the largest angle.

	°
--	---

1 mark

10

Write the missing digits to make this long multiplication correct.

$$\begin{array}{r}
 4 \square \\
 \times \square 7 \\
 \hline
 3 2 2 \\
 9 2 0 \\
 \hline
 1 2 4 2
 \end{array}$$

 2 marks

- 11 Here is a number written in Roman numerals.

CCIX

Write the number in figures

1 mark

- 12 What number is halfway between 1.2 and 2.9 ?

1 mark

- 13 Round 535,991

to the nearest 10,000

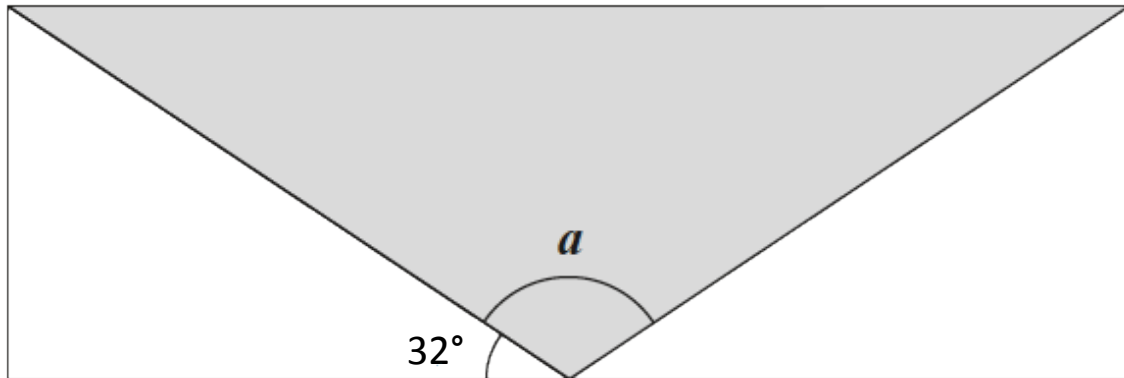
to the nearest 1,000

to the nearest 100

2 marks

R5

- 14 A shaded isosceles triangle is drawn inside a rectangle.



Not to scale

Calculate the size of angle a .

Show your method

a is	°
--------	---

2 marks

15 Large pizzas cost £9.50 each.

Small pizzas cost £7.90 each.

6 children together buy 3 large pizza and 3 small pizzas.

They share the cost equally.

How much does each child pay?

Show
your
method

£

2 marks

16 Seven children measure their heights.

Child	Height (cm)
Brian	142
Ray	154
James	143
Dale	139
Mel	142
Harry	141
Pierre	147

What is the mean height of the children?

Show your method

cm

2 marks

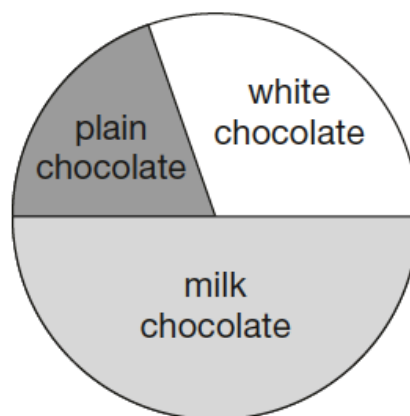
17

100 girls and 250 boys were asked which kind of chocolate they like best.

These two pie charts show the results.



100 girls



250 boys

Jonny says,

"The pie charts show that more girls than boys liked milk chocolate best."

Jonny is wrong.

Explain how you know.

1 mark

Show
your
method

£

19 On Saturday, Lara read $\frac{2}{8}$ of her book.



Show
your
method

pages

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