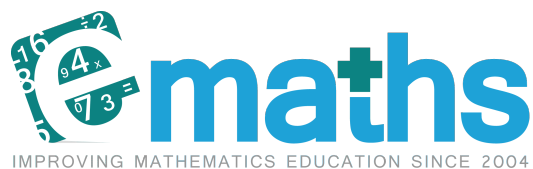


National curriculum tests

Key stage 2

Practice Paper: Reasoning R8

| | | | | | | |
|---------------|-----|--|-------|--|------|--|
| 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:

Diagram illustrating a method box. The box is a grid of 20 columns and 10 rows. 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 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.**

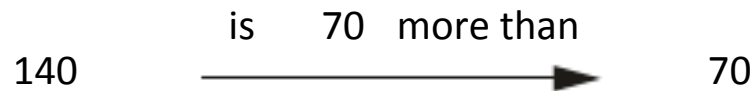
Marks

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

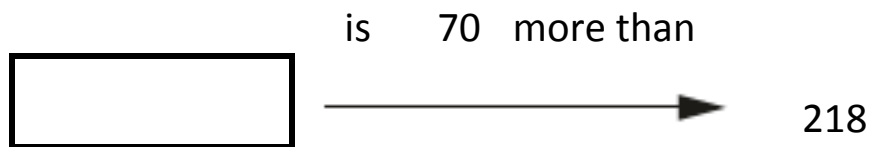
1 Write the missing number.

One is done for you.

140 is 70 more than 70



is 70 more than 218



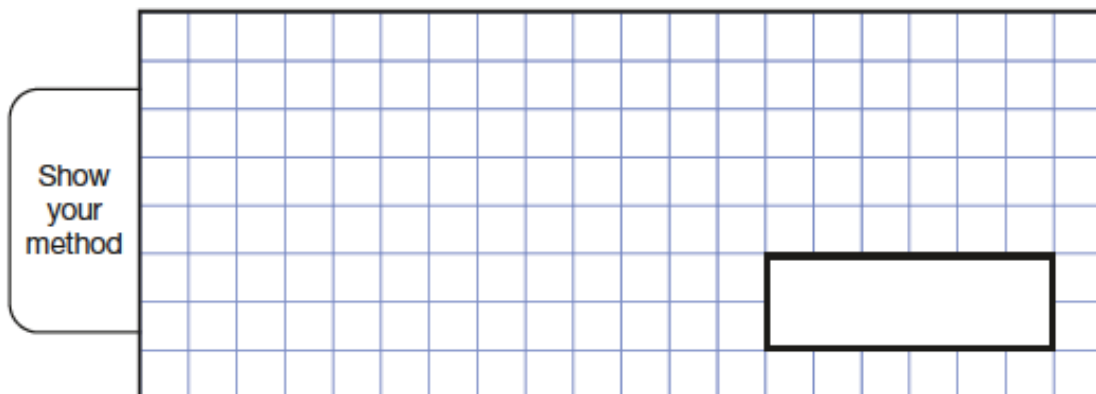
1 mark

2 A packet of paper has 300 sheets

4 children each take 7 sheets

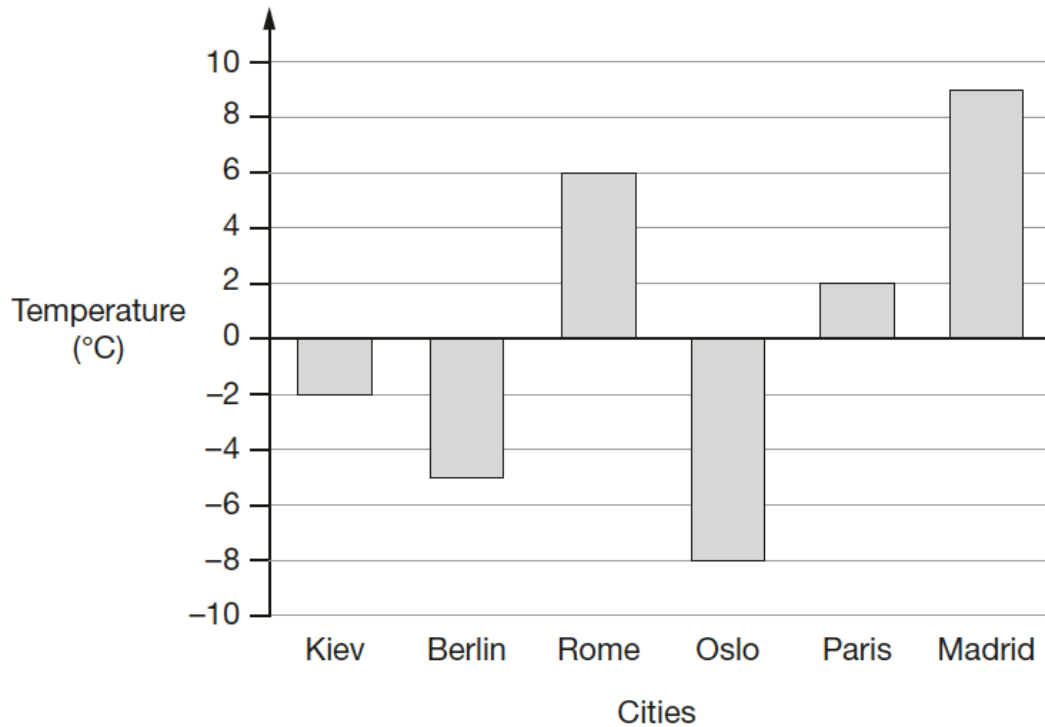
How many sheets of paper are left in the packet?

Show your method



2 marks

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



Which city was 11 degrees **colder** than Madrid?

1 mark

What was the **difference** between the temperature in **Rome** and the temperature in **Oslo**?

°C

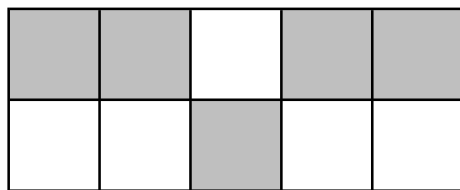
1 mark

4 Here are some shapes made of squares.

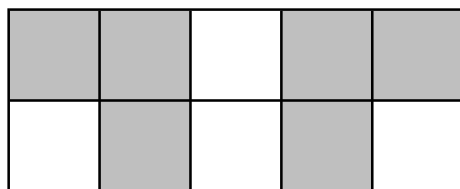
A fraction of each shape is shaded.

Match each shape to its equivalent fraction.

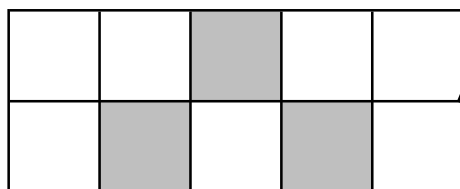
One has been done for you.



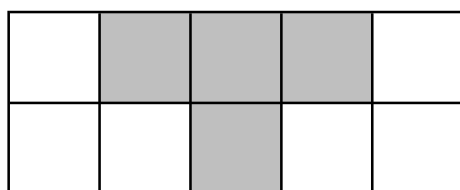
$$\frac{3}{10}$$



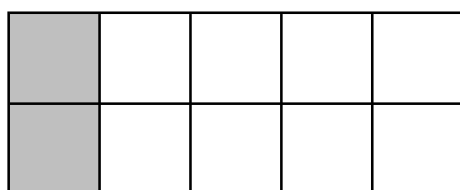
$$\frac{1}{5}$$



$$\frac{2}{5}$$



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



$$\frac{3}{5}$$

2 marks

5 What is **227** minutes in hours and minutes?

hours minutes

1 mark

6 Jude's watch shows five minutes past nine.

The watch is thirteen minutes fast



What is the correct time?

1 mark

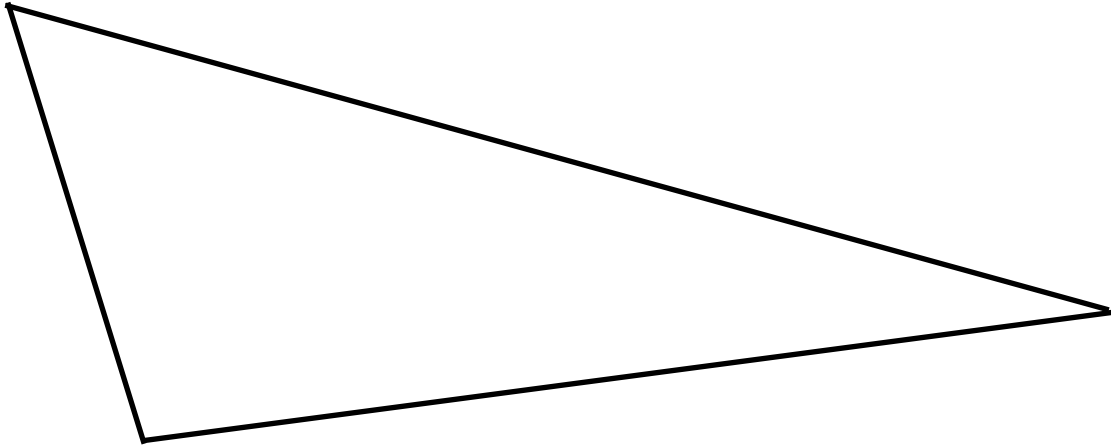
7 In the squares, write a multiple that belongs to each set.

One has been done for you.

| | | | |
|-------------------------|-------------|----|----|
| numbers from 1 to 99 | multiple of | 10 | 40 |
| numbers from 101 to 199 | multiple of | 30 | |
| numbers from 201 to 299 | multiple of | 40 | |
| numbers from 301 to 399 | multiple of | 20 | |

2 marks

9 Here is a triangle.



Measure the longest side accurately, in centimetres.

1 mark

Measure the smallest angle.

1 mark

10

Write the missing digits to make this long multiplication correct.

$$\begin{array}{r}
 4 \square \\
 \times \square 7 \\
 \hline
 2 9 4 \\
 8 4 0 \\
 \hline
 1 1 3 4
 \end{array}$$

 2 marks

- 11 Here is a number written in Roman numerals.

DXIII

Write the number in figures

1 mark

- 12 What number is halfway between 1.7 and 3.2 ?

1 mark

- 13 Round 162,835

to the nearest 10,000

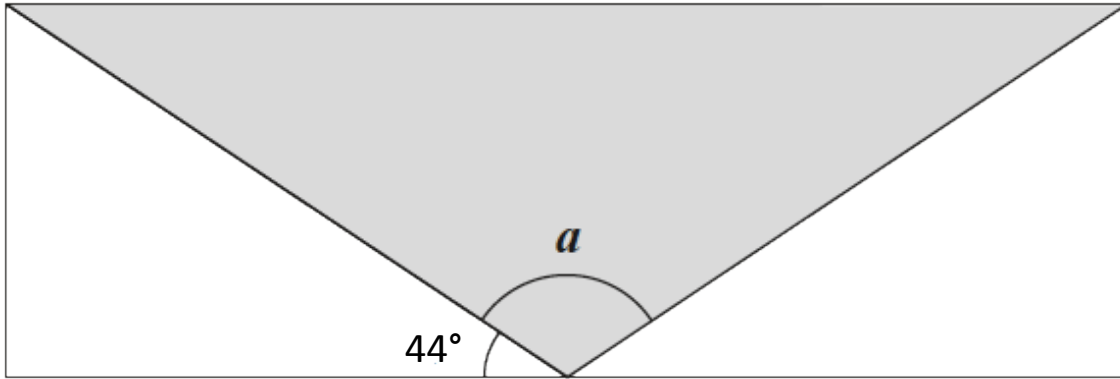
to the nearest 1,000

to the nearest 100

2 marks

R8

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

16 Seven children measure their heights.

| Child | Height (cm) |
|--------|-------------|
| Bill | 152 |
| Gill | 143 |
| Phil | 149 |
| Will | 150 |
| Harry | 145 |
| Carrie | 137 |
| Barry | 139 |

What is the mean height of the children?

Show your method

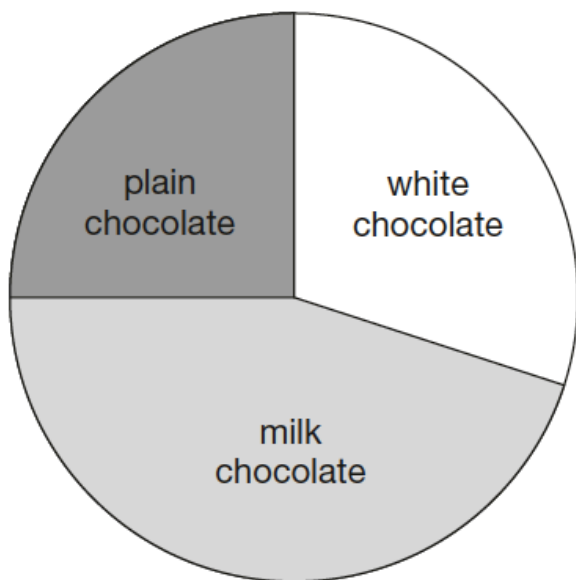
cm

2 marks

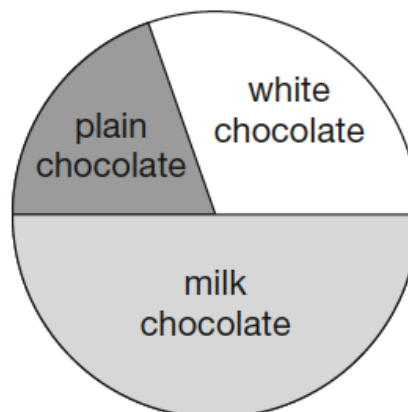
17

90 girls and 220 boys were asked which kind of chocolate they like best.

These two pie charts show the results.



90 girls



220 boys

Steve says,

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

Steve is wrong.

Explain how you know.

A large, empty, cloud-shaped box with a scalloped border, intended for the student to write their explanation.

1 mark

