

**'Now we are ready to start the test.  
For the first group of questions you will have 5 seconds to work out each answer and write it down.'**

1	Multiply thirty-one by ten.
2	How many centimetres are there in one metre?
3	What is one quarter of twenty-four?
4	Subtract three from minus five.
5	Look at the equation. When $x$ equals six, what is the value of $y$ ?
6	What is three point nine divided by two?
7	To the nearest centimetre the length of a pencil is ten centimetres. What is the least value the length of the pencil could be?

**'For the next group of questions you will have 10 seconds to work out each answer and write it down.'**

8	The chart shows the temperature at midday for one week. Which day had a midday temperature of five degrees Celsius?
9	A robot moves one metre north, then one metre east, then one metre south, then one metre west. What is the name of the shape of the robot's path?
10	Look at the triangle on the grid. Write the coordinates of the point marked C.
11	How many nought point fives are there in ten?
12	Think about the distance eight kilometres. About how many miles is that? Ring the best answer on your answer sheet.
13	Look at the fraction. Write it in its simplest form.

**'Now turn over your answer sheet.'**

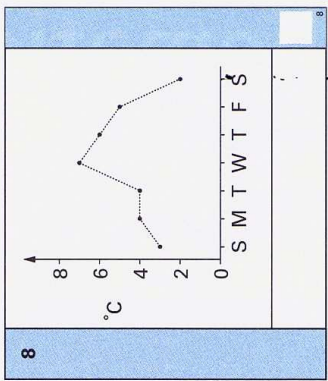
14	In a survey, people said whether they liked Mexican food. The pie chart shows the results. What percentage of people said no?
15	What is the area of this square?

Key stage 3 mathematics 2003  
Mental mathematics Test B

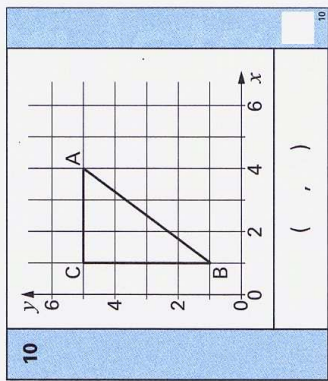
First name \_\_\_\_\_  
Last name \_\_\_\_\_  
School \_\_\_\_\_

Total marks

Time: 10 seconds



9



11

12

4 5 6 7 8

13

120  
200

Practice question

60

Time: 5 seconds

1  31

2  cm

3

4  -5

5   $y = x^2$

6  3.9

7  cm

two?

equation. Solve it to find the value of  $k$ .

bone in the human body is in the leg.  
length of this bone in a man is fifty centimetres.  
it is ten per cent less.

average length of this bone in a woman?

and pit is a cuboid measuring three metres by four metres by  
fives.

calculations on your answer sheet will give the volume of  
and it.

third of three-quarters of one hundred?

inequality. How many integer solutions are there?

sheet will give the volume of

**10 of questions you will have 15 seconds to work out each answer**

hundred?

solutions are there?

of sixty that is bigger than ten but smaller than twenty.

number is two.

hundredth even number?

**15 seconds to work out each** sketch the straight line with equation  $y$  equals  $x$ .

is an approximation for pi, what is the area of a circle with  
centimetres?

three-digit number from the digits two, three and four in  
days.

these three-digit numbers are even?

equation  $y$  equals  $x$ .

it is the area of a circle with

factorisation.

take a ball at random from a bag.

it will be red is two-fifths.

it red balls in the bag. How many of the balls are not red?

one has four vertices?

integers from one to one hundred.

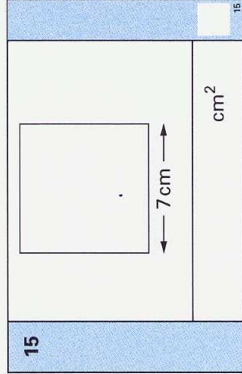
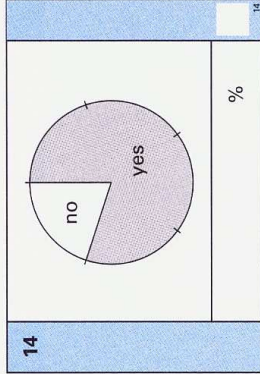
these integers contain a digit two?

**10. The test is finished.**

many of the balls are not red

hundred.

Time: 10 seconds continued



16

$$\frac{k}{2} = 20$$

17

cm	50 cm
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18

3 m by 4 m by 50 cm	
$3 + 4 + 50$	$3 \times 4 \times 50$
$3 + 4 + 0.5$	$3 \times 4 \times 0.5$

19

	100
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20

	$4 < k < 10$
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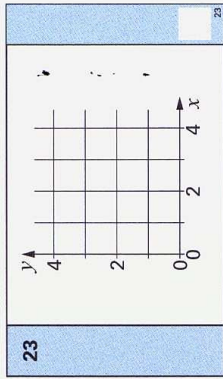
Time: 15 seconds

21

	60
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22

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24

	cm <sup>2</sup>	5 cm
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25

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26

	$\frac{29.95 \times 20.7}{4.97}$
--	----------------------------------

27

	$18y^2 + 6y = 6y^2 ( \dots + \dots )$
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28

	$\frac{2}{5}$
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29

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30

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