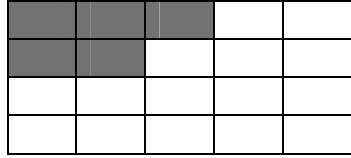
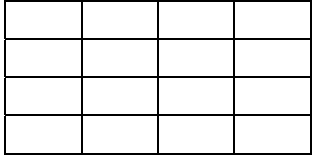
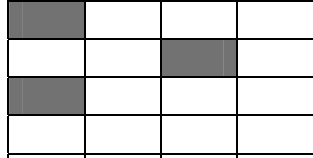
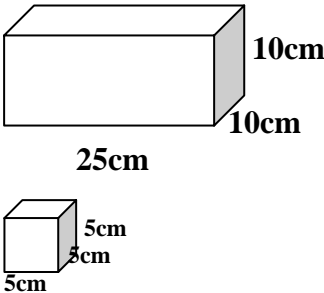


Page 1

Complete each of the following, showing your working in the space provided

$3126 + 995 =$	$3126 - 995 =$	$344 \times 8 =$	Do not write in this box 1 1 1
$344 \div 8 =$	$101 \times 99 =$	Use your previous answer to find $10.1 \times 9.9 =$	1 2 1
$56.6 + 4 =$	$56.6 + 4.4 =$	$56.6 - 4.4 =$	1 1 1
$5600 \div 80 =$ $560 \div 8 =$ $560 \div 0.8 =$	$700 \times 15 =$ $700 \times 1.5 =$ $70 \times 0.15 =$	$47 \times 63 = 2961$ What is $2961 \div 63 =$ $2961 \div 630 =$	1 1 1 1 1 1 1 1

<p>Write these three decimals in order of size, starting with the <u>largest</u> first.</p> <p>0.1101, 0.1011, 0.1110</p> <p>.....</p>	<p>Find 20% of £350</p> <p>.....</p>	<p>Find three sevenths of 105p</p> <p>.....</p>	<p>Do not write in this box</p> <p align="center">2 1 1</p>
<p>What needs to be subtracted from 55.3 to give the highest prime number?</p> <p>.....</p>	<p>Robert has 48 sweets. He keeps 25% of them for himself and shares the remainder between Colin and Jeff. Colin gets twice as many as Jeff. How many does Jeff get?</p> <p>.....</p>	<p>Write down a decimal between 0.2 and 0.3</p> <p align="center">-----</p> <p>Write down a fraction between $\frac{1}{4}$ and $\frac{1}{5}$</p> <p align="center">-----</p>	<p align="center">1 2 1 1</p>
<p>Which of these is the smallest and which is the largest?</p> <p align="center">15%, 0.2, $\frac{1}{8}$</p> <p>Smallest = -----</p> <p>Largest = -----</p>	<p>What are the next two numbers in these series?</p> <p>2, 3, 5, 8, 13, ...</p> <p align="center">-----, -----</p> <p>$\frac{2}{3}, \frac{4}{9}, \frac{8}{27}, \frac{16}{81}, \dots$</p> <p align="center">-----, -----</p>	<p>What is the largest number that will divide exactly into</p> <p align="center">21, 63 and 91?</p> <p align="center">-----</p>	<p align="center">2 2 2 1</p>
<p>What fraction of this flag has been shaded? Give the fraction as simply as possible.</p>  <p align="center">-----</p>	<p>Shade in seven eighths of the flag below.</p> 	<p>Shade as many extra sections as necessary to fill in five twelfths of the flag below.</p> 	<p align="center">2 2 2</p>

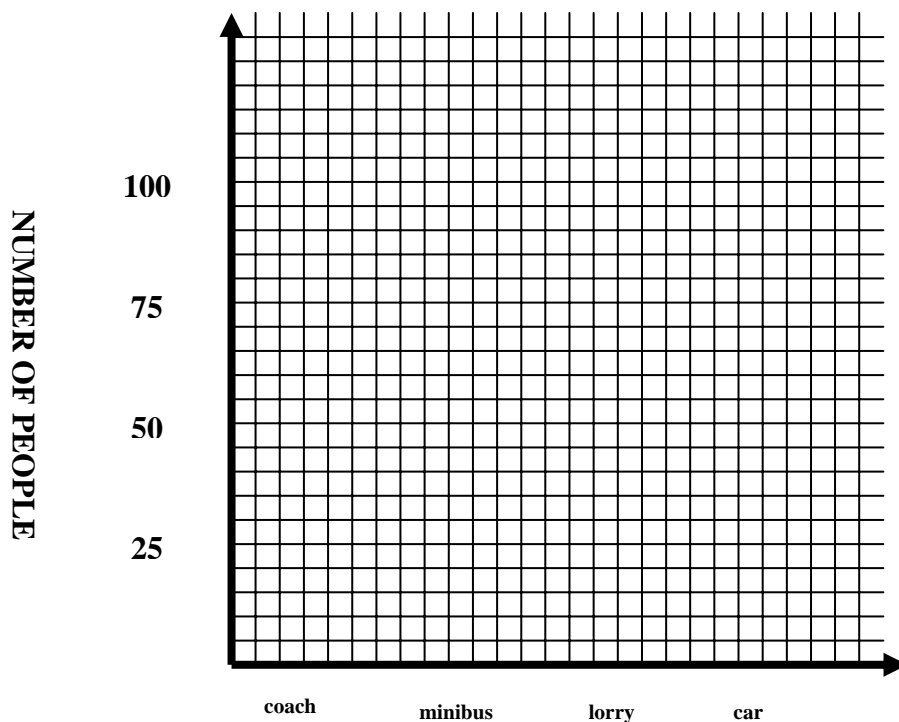
<p>What is ten thousand one hundred and six minus one thousand, four hundred and nine. <u>Give your answer in words.</u></p> <p>----- -----</p>	<p>Find two numbers that have a difference of 8 but multiply to 65</p> <p>-----</p>	<p>Add together</p> $\frac{3}{4} + \frac{5}{12}$ <p>-----</p>	<p>Do not write in this box</p> <p>1</p> <p>2</p> <p>3</p>
<p>Change these fractions into decimals.</p> <p>$\frac{1}{5} = \dots\dots\dots$</p> <p>$\frac{1}{50} = \dots\dots\dots$</p> <p>$\frac{3}{500} = \dots\dots\dots$</p>	<p>Susan has £36. Alex has one third as much again as Susan.</p> <p>How much does Alex have?</p> <p>-----</p> <p>Brian has one third as much as Susan and Alex together. How much does Brian have?</p> <p>-----</p>	<p>Write the number 28 as the product of two whole numbers.</p> <p>---- x ----</p> <p>---- x ----</p> <p>---- x ----</p>	<p>3</p> <p>2</p> <p>3</p>
 <p>How many of the small boxes will fit into the larger box?</p> <p>-----</p> <p>-----</p>	<p>I think of a whole number and multiply it by itself. I then subtract twice the original number. I am left with 35. What was the original number</p> <p>-----</p>	<p>Complete the bill below</p> <p>7 pens @ 35p each</p> <p>3 books @ £1.65 each</p> <p>15 coloured pencils @ 22p each</p> <p>Total</p> <p>How much change do I get from £20?</p> <p>.....</p>	<p>3</p> <p>1</p> <p>5</p>

The vehicles listed below were stuck in a traffic jam on the M25 motorway

- 2 coaches each with 49 passengers plus the driver
- 10 lorries each with just a driver
- 2 minibuses, one with 15 passengers and the other with 13. Both have a driver too
- 4 cars each with 3 people in them
- 2 cars with a driver only
- 1 large car with 6 including the driver

Do not write in this box

Complete the bar chart showing the number of people stuck in each type of vehicle

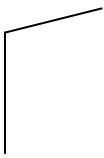
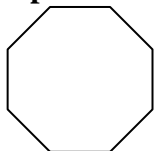
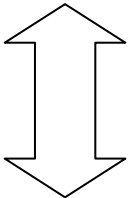
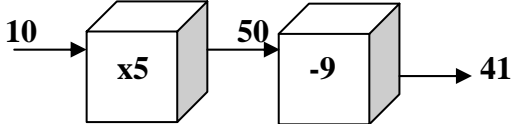
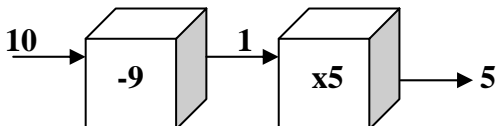


4

In the following questions fill in the missing number. Remember you can only use whole numbers and you **must not** use the number 1.

$17 + \dots = 45$	$\dots - 33 = 76$	$11 \times \dots = 165$
$7 \times \dots + 11 = 67$	$(\dots + 9) \times 5 = 80$	$153 \div \dots = 17$
$\dots \times \dots = 121$	$\dots \div 9 = 15$	$\dots \times \dots = 72$

9

<p>Write down in figures the number twenty million, twenty two thousand and twenty two</p> <p>-----</p>	<p>A piece of wood is 2.25m long. Chris cuts off two pieces, each of length 725mm. How much wood is left over?</p> <p>-----</p>	<p>Susan has £1 to spend on sweets. She buys two chocolate bars at 34p each and one packet of fruit chews at 27p. How much change does she get back?</p> <p>-----</p>	<p>Do not write in this box</p> <p align="center">1 2 2</p>
<p>This year September 14th will be on a Wednesday. What day of the week will October 14th be on, this year?</p> <p>-----</p>	<p>The factors of 12 are ; 1, 2, 3, 4, 6 and 12.</p> <p>What are the factors of 30?</p> <p>-----</p>	<p>Estimate the size of the angle shown below</p>  <p>-----</p>	<p align="center">1 4 1</p>
<p>What is the name of this shape?</p>  <p>.....</p>	<p>Draw all lines of symmetry on this shape</p> 	<p>Draw a right angled scalene triangle below</p>	<p align="center">1 1 1</p>
<p>Roger has a number machine. It multiplies any number put into it by 5 and then subtracts 9. So when he puts in 10, out comes 41</p>  <p>Tim changes the boxes around so that when he puts in 10, out comes 5</p>  <p>If they both put the same number into their machines and Roger gets 51 what will Tim get?</p> <p>-----</p>			<p align="center">3</p>

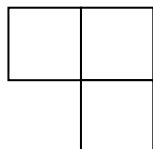
Jane is using matchsticks to make box patterns.



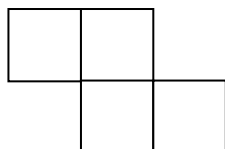
1 square 4 matchsticks



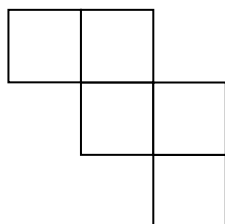
2 squares 7 matchsticks



3 squares 10 matchsticks



4 squares ____ matchsticks



5 squares ____ matchsticks

Now complete the table for Jane

Squares	1	2	3	4	5	6	10	20	100
matchsticks	4	7	10						

If you had 55 matchsticks, how many squares could you make?

THIS IS THE END OF THE EXAMINATION
NOW GO BACK AND CHECK YOUR WORK

Do not
write
in this
box

6

1

Reigate Grammar School



11+ Entrance Examination January 2005

MATHEMATICS

Time allowed: 45 minutes

NAME.....

- Work through the paper carefully
- **You do not have to finish everything**
- Do not spend too much time on any single question
- Show any working in the spaces provided
- Use the blank left hand pages for rough work

PAGE	1	2	3	4	5	6	TOTAL
MARK	18	22	23	13	17	7	100
MARK							

