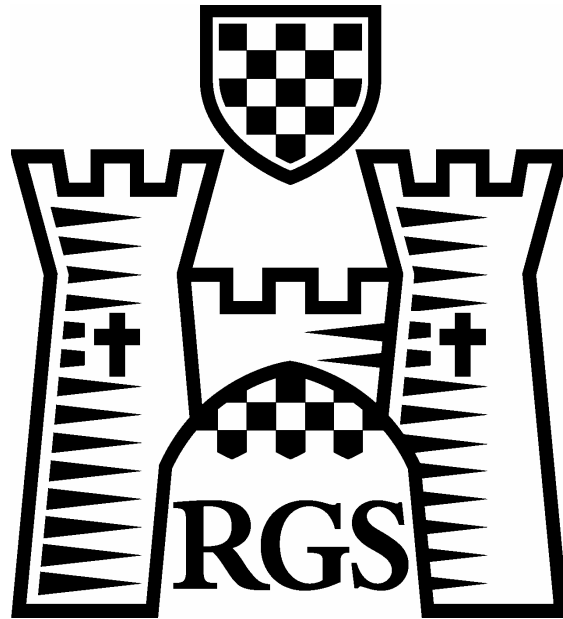


Reigate Grammar School



11+ Entrance Examination

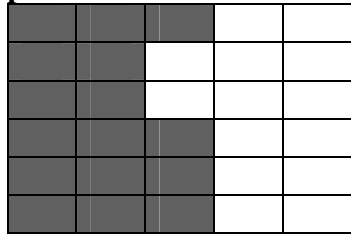
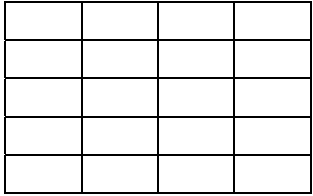
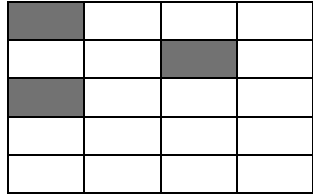
NOVEMBER 2006

MATHEMATICS

Page 1

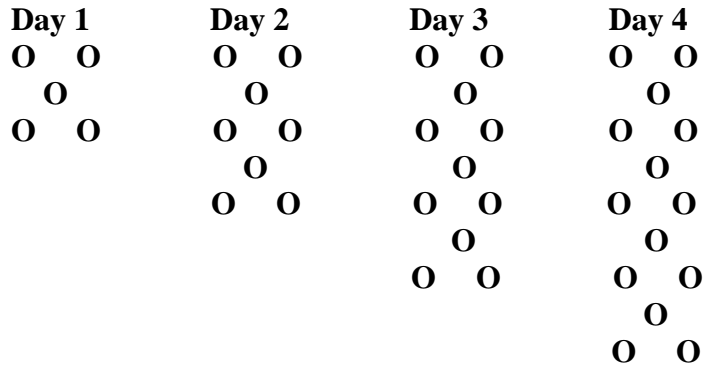
Complete each of the following, showing your working in the space provided

$3154 + 1999 =$	$3154 - 1999 =$	$123 \times 8 =$	Do not write in this box 1 1 1
$296 \div 8 =$	$2001 \times 5 =$	Use your previous answer to find $20.01 \times 5 =$	1 2 1
$13.7 + 3 =$	$13.7 + 0.3 =$	$13.7 + 0.03 =$	1 1 1
Given that $799 \div 47 = 17$ Use your answer to find $17 \times 47 =$ and $799 \div 17 =$ and $799799 \div 47 =$	Given that $65 \times 8 = 520$ Use this answer to find $650 \times 80 =$ and $6.5 \times 0.8 =$	Given that $14598 + 25047 = 39645$ What is $39645 - 25047 =$ and $145.98 + 250.47 =$	1 1 1 1 1 1 1

<p>Write these four fractions in order of size, starting with the <u>largest</u> first.</p> <p align="center"> $\frac{3}{4}$ $\frac{3}{5}$ $\frac{2}{3}$ $\frac{7}{10}$ </p> <p>.....</p>	<p>Find 25% of £600</p> <p>.....</p>	<p>Find two fifths of 405p</p> <p>.....</p>	<p>Do not write in this box</p> <p align="center">2</p> <p align="center">2</p> <p align="center">2</p>
<p>What needs to be subtracted from 8×8 to give the answer 47.5?</p> <p>.....</p>	<p>Susan has £36. Jack has only $\frac{2}{3}$ of what Susan has. How much money must Susan give to Jack if they are to have the same amount as each other?</p> <p>.....</p>	<p>Write down a <u>fraction</u> between 0.5 and 0.8</p> <p align="center">-----</p> <p>Write down a <u>decimal</u> between $\frac{9}{10}$ and 1</p> <p align="center">-----</p>	<p align="center">1</p> <p align="center">2</p> <p align="center">1</p> <p align="center">1</p>
<p>Which of these decimals is the smallest and which is the largest?</p> <p>2.1011 2.1101 2.0111</p> <p>Smallest = -----</p> <p>Largest = -----</p>	<p>What are the next two numbers in these series?</p> <p>1458, 486, 162, 54, 18, ...</p> <p align="center">-----, -----</p> <p>1, 1, 2, 3, 5, 8, 13,....</p> <p align="center">-----, -----</p>	<p>What is the largest number that divides exactly into?</p> <p>24, 32 and 40?</p> <p align="center">-----</p>	<p align="center">2</p> <p align="center">2</p> <p align="center">2</p> <p align="center">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 three fifths of the flag below.</p> 	<p>Shade as many extra sections as necessary to fill in two fifths of the flag below.</p> 	<p align="center">2</p> <p align="center">2</p> <p align="center">2</p>

<p>What is the difference between three thousand and seventeen and seven hundred and eight? <u>Give your answer in words.</u></p> <p>----- -----</p>	<p>The sum of two numbers is 17 but when you multiply them you get 60. What are the two numbers?</p> <p>-----</p>	<p>Add together, simplifying your answer</p> $\frac{1}{5} + \frac{3}{10}$ <p>-----</p>	<p>Do not write in this box</p> <p>2</p> <p>2</p> <p>2</p>
<p>Change these decimals into fractions.</p> <p>0.3 =</p> <p>0.03 =</p> <p>0.33 =</p>	<p>You have to catch the bus after school. The times of the buses are 15.55 and 16.35. If you are 4 minutes late for the first bus, how long will you have to wait for the next?</p> <p>-----</p>	<p>Write the number 45 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>Peter was born on the 30th September 1997. How old will he be in years, months and days on 10th January 2007?</p> <p>.....Y.....M.....D.</p>	<p>Susan had £480 to spend. She used $\frac{2}{3}$ of her money on a trip. She then used a quarter of the remainder to pay off a bill. How much did she have left at the end?</p> <p>-----</p>	<p>Rulers cost 25p each Pencils cost 12p each Protractors cost 10p each</p> <p>What is the cost of a set of all three?</p> <p>.....</p> <p>How many sets can I buy for £5?</p> <p>.....</p> <p>How much change will I have?</p> <p>.....</p>	<p>3</p> <p>3</p> <p>3</p>

The diagrams below show how a gardener plants his roses in his garden over a number of days



Do not write in this box

Fill in the table below showing the number of roses on given days

Number of Days	1	2	3	4	5	6	10
Number of Roses							

4

After how many days will the gardener have planted 101 roses?

.....

2

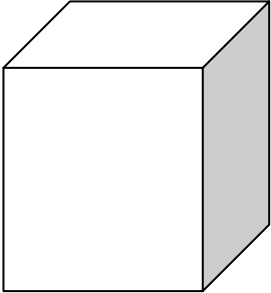
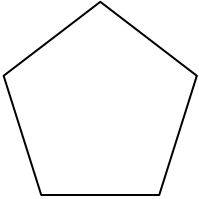
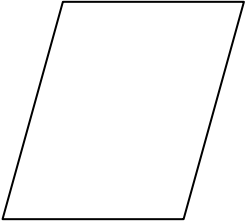
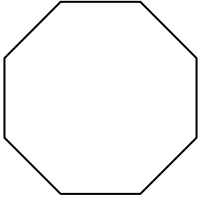
Below is a magic square. Each row, column and diagonal adds up to the same number. Fill in the missing numbers.

	-6	+1
	-1	
-3		

5

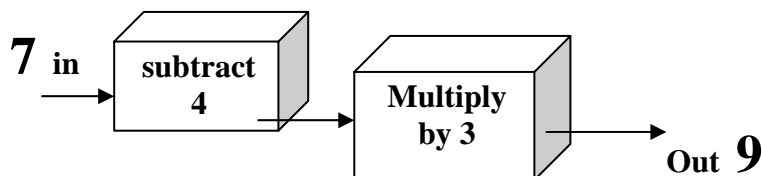
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In the following questions fill in the missing number. You can only use WHOLE numbers and you CANNOT USE the number 1.

$25 + \dots = 42$	$\dots - 101 = 27$	$17 \times \dots = 187$	Do not write in this box 3
$(4 \times \dots) - 6 = 42$	$(\dots + 3) \times 11 = 132$	$135 \div \dots = 9$	3
$\dots \times \dots = 169$	$\dots \div 9 = 13$	$(\dots - 7) \div 8 = 13$	3
 <p>The cube above has each side 5cm. What is the total length of all the edges?</p> <p>What is the total area of all the sides?</p>			<p>2</p> <p>3</p>
<p>Name the following shapes</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>.....</p> </div> <div style="text-align: center;">  <p>.....</p> </div> <div style="text-align: center;">  <p>.....</p> </div> </div>			<p>1</p> <p>1</p> <p>1</p>

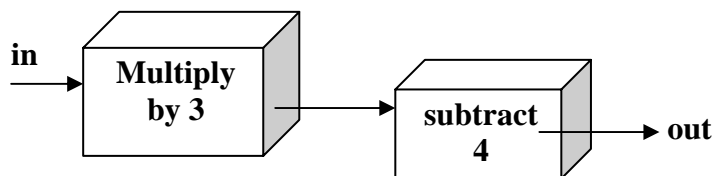
Tom and Sarah are playing with number machines.

Tom's machine subtracts 4 from any number put into it and then multiplies the result by 3



When he puts 7 in, out comes 9

Sarah's machine multiplies by 3 and then subtracts 4



If Sarah puts in the number 7, what number comes out?.....

2

If Tom puts 10 into his machine and then feeds his answer into Sarah's machine, what will finally appear from Sarah's machine?

3

If Sarah puts a number into her machine and then feeds her answer into Tom's machine and then Tom's machine produces 66, what number did Sarah feed into her machine?.....

3

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

Do not write in this box

Reigate Grammar School



11+ Entrance Examination January 2007

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	17	24	23	11	17	8	100
MARK							

