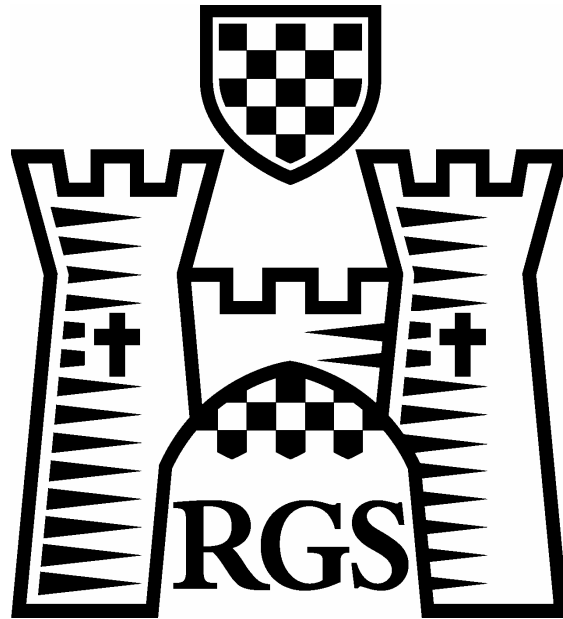


# Reigate Grammar School



## 13+ Entrance Examination

NOVEMBER 2006

## MATHEMATICS NON CALCULATOR PAPER

Time allowed: 20 minutes

NAME.....

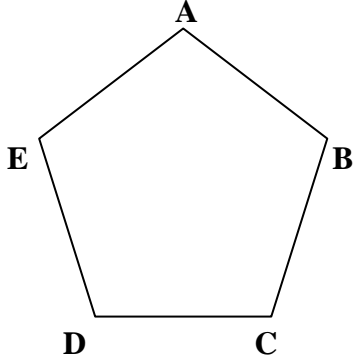
- Work through the paper carefully
- Do not spend too much time on any single question
- Show any working in the spaces provided
- Use the blank left hand pages for rough work

**Page 1**

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

$1473 + 499 =$	$1473 - 499 =$	$1005 \times 5 =$	Do not write in this box  1  1  1
$1005 \div 5 =$	$17 - 2(14 - 2 \times 3) =$	$3^{12} \div 3^3 = 3^n$ What is the value of n?  Simplify $\frac{a^3 \times a^4}{a^7}$  .....	1  2  1  2
$14.44 + 4 =$	$14.44 + 4.4 =$	$14.44 + 4.44$	1  1  1
Given that $390 \div 13 = 30$  Use this to find  $3.9 \div 13 =$       $3900 \div 1.3 =$	Give that $60 \times 75 = 4500$  Use this to find  $60 \times 7.5 =$       $600 \times 7500 =$	Given that $540 \times 25 = 13500$  what is $13500 \div 540 =$       and what is $5.4 \times 2.5 =$	1  1       1  1       1  1

**Page 2**

<p><b>Put these three quantities in order starting with the <u>smallest</u></b></p> <p>25%, <math>\frac{1}{5}</math>, 0.23</p>	<p><b>What is 45% of \$700?</b></p>	<p><b>Find one sixth of 14.1cm<sup>2</sup></b></p>	<p>Do not write in this box</p> <p>2</p> <p>2</p> <p>2</p>
<p><b>Solve the equations</b>  <math>6x - 2 - 3(x - 4) = 13</math></p> <p>.....</p> <p><math>\frac{x}{5} - \frac{x}{6} = \frac{1}{15}</math></p> <p>.....</p>	<p><math>\frac{2}{7} \div \frac{2}{3} + \frac{3}{14} =</math></p> <p><math>\frac{9}{10} \div \left(\frac{1}{6} + \frac{2}{3}\right) =</math></p>	<p><b>Write down a decimal between 10.01 and 10.1</b></p> <p><b>Write down a fraction between 0.8 and 85%</b></p>	<p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>1</p> <p>1</p>
<p><b>Find a formula for the <i>n</i>th term in the sequences</b></p> <p>3 5 7 9 11 13.....</p> <p>2 5 10 17 26 .....</p>	<p><b>What is <math>\frac{7}{50}</math> as a percentage?</b></p> <p><b>as a decimal?</b></p>	<p><b>A man shares £200 between his three children in the ratio of 2:3:5. How much does each child get?</b></p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>4</p>
<div style="display: flex; align-items: center;"> <div style="flex: 1;">  </div> <div style="flex: 2;"> <p><b>ABCDE is a regular pentagon</b>  <b>Find the sizes of the angle</b></p> <p>(a) <b>EAB</b></p> <p>(b) <b>DAC</b></p> </div> </div>			<p>2</p> <p>2</p>

