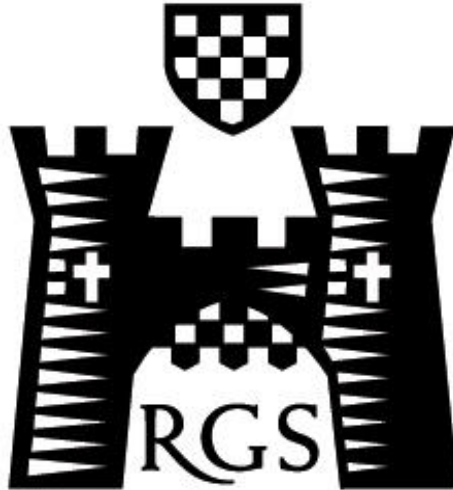


# Reigate Grammar School



## 13+ Entrance Examination November 2014 Non-Calculator MATHEMATICS

Time allowed: 20 minutes

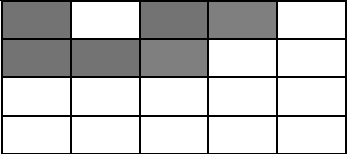
NAME.....

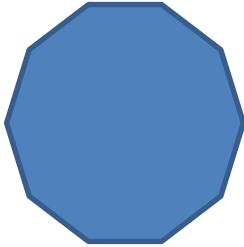
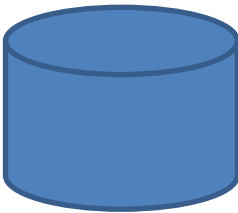
- Work through the paper carefully
- **You do not have to finish everything**
- Do not spend too much time on any single question
- Show any working in the spaces provided
- Use the blank left hand pages for rough work
- You may not use a calculator

**PAGE 1**  
**ANSWER ALL QUESTIONS IN THE SPACES PROVIDED, SHOWING ANY  
NECESSARY WORKINGS**

<b>2014 + 1597 =</b>	<b>2014 – 1597 =</b>	<b>What is 2014 x 100?</b>	DO NOT WRITE IN THIS BOX  <b>1</b> <b>1</b> <b>1</b>
<b>Use your previous answer to write down 2014 x 25</b>	<b>Use these last two answers to write down 2014 x 125</b>	<b>Use your previous answer to write down 2014 x 1.25</b>	<b>1</b> <b>1</b> <b>1</b>
<b>2014 - 9 =</b>	<b>2014 - 90 =</b>	<b>2014 - 900 =</b>	<b>1</b> <b>1</b> <b>1</b>
<b>Given that 27 x 37 = 999</b>  <b>What is 999 ÷ 27 ?</b>  <b>What is 9990 ÷ 370?</b>  <b>What is 1998 ÷ 37?</b>	<b>What is 6 x 16 ?</b>  <b>What is 600 x 1.6?</b>  <b>What is 6 x 0.16?</b>	<b>What is 6000 ÷ 100?</b>  <b>What is 6000 ÷ 200?</b>  <b>What is 6000 ÷ 25?</b>	<b>1</b> <b>1</b> <b>1</b>  <b>1</b> <b>1</b> <b>1</b>  <b>1</b> <b>1</b> <b>1</b>

**PAGE 2**

<p><b>Which of these three is the largest and which is the smallest?</b></p> <p align="center"><b>70%   0.6   <math>\frac{5}{8}</math></b></p> <p><b>Largest =</b></p> <p><b>Smallest =</b></p>	<p><b>What is 10% of £40?</b></p> <p><b>What is 20% of £40?</b></p> <p><b>What is 5% of £40?</b></p> <p><b>Use your answers to find 35% of £40</b></p>	<p><b>Find one seventh of 420</b></p> <p><b>Use your answer to find four sevenths of 420</b></p>	<p><b>DO NOT WRITE IN THIS BOX</b></p> <p align="center"><b>1</b></p> <p align="center"><b>1</b></p> <p align="center"><b>1</b></p> <p align="center"><b>1</b></p> <p align="center"><b>1</b></p> <p align="center"><b>1</b></p> <p align="center"><b>1</b></p>
<p><b>Add together</b></p> <p align="center"><b><math>\frac{1}{5}</math> of 40</b></p> <p align="center"><b><math>\frac{2}{3}</math> of 27</b></p> <p><b>and   <math>\frac{1}{2}</math> of 13</b></p>	<p><b>Albert is 14 years old.</b></p> <p><b>Cuthbert is twice as old as Albert.</b></p> <p><b>Egbert is <math>\frac{1}{4}</math> of Cuthbert's age.</b></p> <p><b>What is their total age?</b></p>	<p><b>Write down a percentage between 0.3 and 0.4</b></p> <p><b>Write down a fraction between 12% and 14%</b></p>	<p align="center"><b>1</b></p> <p align="center"><b>1</b></p> <p align="center"><b>1</b></p> <p align="center"><b>1</b></p> <p align="center"><b>1</b></p> <p align="center"><b>1</b></p> <p align="center"><b>1</b></p>
<p><b>What are the next two numbers in these series</b></p> <p><b>2, 6, 18, 54, .....</b></p> <p align="center"><b>and</b></p> <p><b>2, 6, 12, 20, 30, 42,.....</b></p> <p align="center"><b>and</b></p>	<p><b>Put these decimals in order, starting with the largest.</b></p> <p align="center"><b>0.075, 0.8, 0.09</b></p>	 <p><b>What fraction of this flag is shaded?</b></p> <p><b>How many more rectangles need to be shaded to fill <math>\frac{4}{5}</math> of the flag?</b></p>	<p align="center"><b>2</b></p> <p align="center"><b>2</b></p> <p align="center"><b>1</b></p> <p align="center"><b>1</b></p> <p align="center"><b>1</b></p>

<p>Work out</p> $\frac{1}{3} + \frac{5}{12}$	<p>Work out</p> $\frac{17}{18} - \frac{7}{9}$	<p>Add together the following, giving your answer as a DECIMAL</p> <p>81%, 0.628 and <math>\frac{1}{8}</math></p>	<p>DO NOT WRITE IN THIS BOX</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>
<p>What is the biggest number that divides exactly into 63, 36 and 108?</p>	<p>What is the smallest number that 4, 5, and 6 all divide into?</p>	<p>Find two numbers that have a difference of 14 and add up to 26</p>	<p>1</p> <p>1</p> <p>1</p>
<p>What is 0.9 written as a fraction?</p> <p>What is 0.009 written as a fraction?</p> <p>What is 0.909 written as a fraction?</p>	<p>What is <math>\frac{3}{4}</math> written as a decimal?</p> <p>What is <math>\frac{3}{400}</math> written as a decimal?</p> <p>What is <math>\frac{9}{400}</math> written as a decimal?</p>	<p>Name the shapes below</p>  	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>