

# Year 6 Written Methods of Calculation

ADDITION	SUBTRACTION	MULTIPLICATION	DIVISION																						
<p>Written method used in addition calculations in Year 6 are outlined below.</p> <p><u>Standard Method of Column Addition</u></p> $\begin{array}{r} 3587 \\ + 675 \\ \hline 4262 \\ \hline \end{array}$ <p>This would be extended to numbers with any number of digits. It would also be used to add decimal numbers with 1, 2 or 3 decimal places.</p> $\begin{array}{r} 13.86 \\ + 9.481 \\ \hline 23.341 \\ \hline \end{array}$	<p>Written method used in subtraction calculations in Year 6 are outlined below.</p> <p><u>Standard Method of Subtraction (decomposition)</u></p> $\begin{array}{r} \overset{5}{\cancel{6}} \overset{13}{4} \overset{1}{6} 7 \\ - 2684 \\ \hline 3783 \end{array} \quad \begin{array}{r} \overset{3}{\cancel{4}} \overset{9}{0} \overset{1}{0} 9 \\ - 2764 \\ \hline 1245 \end{array}$ <p>This would be extended to numbers with any number of digits. It would also be used to subtract decimal numbers with 1, 2 or 3 decimal places.</p> $\begin{array}{r} \overset{9}{\cancel{13}} \overset{7}{8} \overset{15}{6} 0 \\ - 9.481 \\ \hline 4.379 \end{array}$ <p>For numbers which need to be subtracted but are close together, children would be encouraged</p>	<p>Written method used in multiplication calculations in Year 6 are outlined below.</p> <p><u>Expanded Partitioning method</u></p> $\begin{array}{r} 87 \\ \times 6 \\ \hline 42 \quad (7 \times 6) \\ 480 \quad (80 \times 6) \\ \hline 522 \\ \hline \end{array}$ <p><u>Standard Short Multiplication Method</u></p> $\begin{array}{r} 87 \\ \times 6 \\ \hline 522 \\ \hline \end{array}$ <p><u>Standard Long Multiplication Method</u></p> $\begin{array}{r} 87 \\ \times 62 \\ \hline 174 \\ 5220 \\ \hline 5394 \end{array}$	<p>Written method used in division calculations in Year 6 are outlined below.</p> <p><u>Standard Method of Short Division (Bus Stop)</u></p> $5 \overline{) 22337} \begin{array}{l} 47 \text{ r } 2 \\ 22337 \end{array}$ <p>Usually used when the divisor is a single digit number.</p> <p><u>Standard Method of Long Division</u></p> $36 \overline{) 977} \begin{array}{l} 27 \\ 72 \downarrow \\ 257 \\ 252 \\ \hline 5 \end{array}$ <p><math>977 \div 36 = 27 \text{ rem } 5</math></p> <p>Jottings such as these are used to check the number of times a number goes into another number – but estimation is helpful.</p> <table style="margin-left: auto; margin-right: 0;"> <tr> <td></td> <td style="text-align: right;">36</td> </tr> <tr> <td>1</td> <td style="border-left: 1px solid black; text-align: right;">36</td> </tr> <tr> <td>2</td> <td style="border-left: 1px solid black; text-align: right;">72</td> </tr> <tr> <td>3</td> <td style="border-left: 1px solid black;"></td> </tr> <tr> <td>4</td> <td style="border-left: 1px solid black; text-align: right;">144</td> </tr> <tr> <td>5</td> <td style="border-left: 1px solid black; text-align: right;">180</td> </tr> <tr> <td>6</td> <td style="border-left: 1px solid black;"></td> </tr> <tr> <td>7</td> <td style="border-left: 1px solid black;"></td> </tr> <tr> <td>8</td> <td style="border-left: 1px solid black; text-align: right;">288</td> </tr> <tr> <td>9</td> <td style="border-left: 1px solid black;"></td> </tr> <tr> <td>10</td> <td style="border-left: 1px solid black; text-align: right;">360</td> </tr> </table>		36	1	36	2	72	3		4	144	5	180	6		7		8	288	9		10	360
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# Year 6 Maths Evening

*Thank you for joining us tonight. We hope that by the end of the evening you will feel more able to support your child in their maths work.*

## How do I help my child with maths?

Do more of what they have been doing, rather than racing ahead – we time the introduction of methods carefully.

If they are stuck on a homework, talk through it – resist the temptation to show them how it is done.

Encourage them to practice maths!

Tables practice in the car

Add up prices in a shop (mass, capacity)

Play on websites



## Maths Websites

The following websites are really useful for improving mental maths skills...

**Maths Magician** [www.tiny.cc/lgjs1](http://www.tiny.cc/lgjs1)

Choose operation type and level – gives an exciting certificate at the end!

**Powerlines** [www.tiny.cc/lgjs3](http://www.tiny.cc/lgjs3)

Mathematical reasoning and addition skills.

**Speed addition** [www.tiny.cc/lgjs4](http://www.tiny.cc/lgjs4)

Excellent mental addition.

**Speed Subtraction** [www.tiny.cc/lgjs5](http://www.tiny.cc/lgjs5)

Just like speed addition, but with subtraction.

**Crazy Taxi** [www.tiny.cc/lgjs6](http://www.tiny.cc/lgjs6)

A reckless but fun game for practising multiples!

**Maths Lines** [www.tiny.cc/lgjs7](http://www.tiny.cc/lgjs7)

A game practising multiplication and division facts.

**Woodlands** [www.tiny.cc/lgjs8](http://www.tiny.cc/lgjs8)

A primary school site with lots of useful games.

**Hit the Button** [www.tiny.cc/lgjs9](http://www.tiny.cc/lgjs9)

An excellent site for practising multiples.

**Who wants to be a mathionaire?** [www.tiny.cc/lgjs10](http://www.tiny.cc/lgjs10)

Mental maths version of Who wants to be a millionaire?

