

Addition

<p style="text-align: center;"><u>Adding Up in Chunks/Counting On</u></p> <p style="text-align: center;">37 + 48</p>	<p style="text-align: center;"><u>Reordering</u></p> <p style="text-align: center;">25 + 26 + 75</p> <p style="text-align: center;">100 + 26 = 126</p>	<p style="text-align: center;"><u>Place Value - Partitioning</u></p> <p style="text-align: center;">116 + 127</p> <p>100 + 100 = 200 10 + 20 = 30 6 + 7 = 13 200 + 30 + 13 = 243</p>	<p style="text-align: center;"><u>Making Tens/Bridging through 10</u></p> <p style="text-align: center;">49 + 38</p> <p style="text-align: center;">50 + 37 = 87</p>
<p style="text-align: center;"><u>Compensation</u></p> <p style="text-align: center;">67 + 28</p> <p style="text-align: center;">+2</p> <p>67 + 30 = 97 97 - 2 = 95</p>	<p style="text-align: center;"><u>Doubles/Near Doubles</u></p> <p style="text-align: center;">16 + 17</p> <p style="text-align: center;">16 1</p> <p>16 + 16 = 32 32 + 1 = 33</p>	<p style="text-align: center;"><u>Friendly Numbers</u></p> <p style="text-align: center;">28 + 47</p> <p style="text-align: center;">+2 -2</p> <p>30 + 45 = 75</p>	<p style="text-align: center;"><u>Bridging through 60</u></p> <p style="text-align: center;">How many minutes is it to the next hour?</p>

Subtraction

<p style="text-align: center;"><u>Removal or Counting Back</u></p> <p>123 - 69</p> <p>123 - (20+40+3+6)</p> <p>123 - 20 = 103</p> <p>103 - 40 = 63</p> <p>63 - 3 = 60</p> <p>60 - 6 = 54</p>	<p style="text-align: center;"><u>Reordering</u></p> <p style="text-align: center;">25 - 6 - 5</p> <p style="text-align: center;">20 - 6 = 14</p>	<p style="text-align: center;"><u>Place Value - Partitioning</u></p> <p style="text-align: center;">367 - 154</p> <p>367 - 100 = 267 267 - 50 = 217 217 - 4 = 213</p> <p>367 - 100 - 50 - 4 = 213</p>	<p style="text-align: center;"><u>Adding Up/Bridging through 10</u></p> <p style="text-align: center;">23 - 16</p> <p>16 + 4 = 20 20 + 3 = 23</p>
<p style="text-align: center;"><u>Place Value & Negative Numbers</u></p> <p style="text-align: center;">399 - 254</p> <p>(300+90+9) - (200+50+9)</p> <p>300 + 90 + 9</p> <p>- 200 + 50 + 4</p> <p>100 + 40 + 5</p> <p>= 145</p>	<p style="text-align: center;"><u>Adjusting for Easier Numbers</u></p> <p style="text-align: center;">123 - 59</p> <p style="text-align: center;">+1</p> <p>123 - 60 = 63 63 + 1 = 64</p>	<p style="text-align: center;"><u>Keep a Constant Difference</u></p> <p style="text-align: center;">151 - 98</p> <p>(151 + 2) - (98 + 2)</p> <p>153 - 100 = 53 151 - 98 = 53</p>	

Multiplication & Division

<p style="text-align: center;"><u>Friendly Numbers</u></p> <p style="text-align: center;">9 x 15</p> <p>10 x 15 = 150 150 - 15 = 135</p> <p>Don't forget to 'undo' your change!</p>	<p style="text-align: center;"><u>Repeated Addition</u></p> <p style="text-align: center;">6 x 15</p> <p>15+15+15+15+15+15</p> <p>15 + 15 = 30 30 + 15 = 45 45 + 15 = 60 60 + 15 = 75 75 + 15 = 90</p>	<p style="text-align: center;"><u>Partial Products</u></p> <p style="text-align: center;">6 x 125</p> <p>6 x (100 + 20 + 5)</p> <p>(6x100) + (6x20) + (6x5)</p> <p>600 + 120 + 30 = 750</p>	<p style="text-align: center;"><u>Doubling and Halving</u></p> <p style="text-align: center;">24 x 8</p> <p style="text-align: center;">24 x 2 = 48</p> <p style="text-align: center;">48 x 4</p> <p style="text-align: center;">48 x 2 = 96</p> <p style="text-align: center;">96 x 2</p> <p style="text-align: center;">96 x 1 = 192</p>						
<p style="text-align: center;"><u>Breaking Factors into Smaller Factors</u></p> <p style="text-align: center;">12 x 25</p> <p style="text-align: center;">2 x 6</p> <p>2 x 25 = 50 50 x 6 = 300</p>	<p style="text-align: center;"><u>Grid Method</u></p> <p style="text-align: center;">35 x 7</p> <table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="padding: 2px;">x</td> <td style="padding: 2px;">30</td> <td style="padding: 2px;">5</td> </tr> <tr> <td style="padding: 2px;">7</td> <td style="padding: 2px;">210</td> <td style="padding: 2px;">35</td> </tr> </table> <p>210 + 35 = 245</p>	x	30	5	7	210	35	<p style="text-align: center;"><u>Partial Quotients</u></p> <p style="text-align: center;">36 R 10</p> <p>15 550</p> <p>- 180 (10 x 18)</p> <p>400</p> <p>- 360 (20 x 18)</p> <p>100</p> <p>- 30 (2 x 18)</p> <p>70</p> <p>- 60 (4 x 18)</p> <p>10</p>	<p style="text-align: center;"><u>Multiplying Up</u></p> <p style="text-align: center;">72 ÷ 8</p> <p>8 x 5 = 40 8 x 4 = 32 (5 + 4) = (40 + 32) 8 x 9 = 72</p>
x	30	5							
7	210	35							
<p style="text-align: center;"><u>Repeated Subtraction</u></p> <p style="text-align: center;">24 ÷ 6 24 - 6 - 6 - 6 - 6 6 x 4 = 24 so 24 ÷ 6 = 4</p>									