



Multiplication & Division Strategies

<p><u>Friendly Numbers</u></p> <p>9×15</p> <p>$10 \times 15 = 150$</p> <p>$150 - 15 = 135$</p> <p>Don't forget to 'undo' your change!</p>	<p><u>Repeated Addition</u></p> <p>6×15</p> <p>$15+15+15+15+15+15$</p> <p>$15 + 15 = 30$</p> <p>$30 + 15 = 45$</p> <p>$45 + 15 = 60$</p> <p>$60 + 15 = 75$</p> <p>$75 + 15 = 90$</p>	<p><u>Partial Products</u></p> <p>6×125</p> <p>$6 \times (100 + 20 + 5)$</p> <p>$(6 \times 100) + (6 \times 20) + (6 \times 5)$</p> <p>$600 + 120 + 30 = 750$</p>	<p><u>Doubling and Halving</u></p> <p>24×8 x2 ÷2</p> <p>48×4 x2 ÷2</p> <p>96×2 x2 ÷2</p> <p>192</p>						
<p><u>Breaking Factors into Smaller Factors</u></p> <p>12×25</p> <p>^</p> <p>2×6</p> <p>$2 \times 25 = 50$</p> <p>$50 \times 6 = 300$</p>	<p><u>Grid Method</u></p> <p>35×7</p> <table border="1" data-bbox="986 1205 1098 1563"> <tbody> <tr> <td>X</td> <td>30</td> <td>5</td> </tr> <tr> <td>7</td> <td>210</td> <td>35</td> </tr> </tbody> </table> <p>$210 + 35 = 245$</p>	X	30	5	7	210	35	<p><u>Partial Quotients</u></p> <p>$36 \overline{) 1000}$</p> <p>$16 \overline{) 550}$</p> <p>$-150 \quad (10 \times 15)$</p> <p>$400$</p> <p>$-300 \quad (20 \times 15)$</p> <p>$100$</p> <p>$-30 \quad (2 \times 15)$</p> <p>$70$</p> <p>$-60 \quad (4 \times 15)$</p> <p>$10$</p>	<p><u>Multiplying Up</u></p> <p>$72 \div 8$</p> <p>$8 \times$</p> <p>$5 = 40$</p> <p>$8 \times 4 = 32$</p> <p>$(5 + 4) = (40 + 32)$</p> <p>$8 \times 9 = 72$</p>
X	30	5							
7	210	35							
<p><u>Repeated Subtraction</u></p> <p>$24 \div 6$ $24 - 6 - 6 - 6 - 6$ $6 \times 4 = 24$ so $24 \div 6 = 4$</p>									