



Four Operations		Key Vocabulary - Definitions
<p><b>Addition (+)</b></p> $\begin{array}{r} 73.4 \\ + 5.67 \\ \hline 79.07 \\ \hline 1 \end{array}$	<p><b>Subtraction (-)</b></p> $\begin{array}{r} 0 \text{ } 11 \text{ } 13 \text{ } 1 \\ \cancel{1} \cancel{2} \cancel{4} \cancel{0} \\ - 5.97 \\ \hline 6.43 \end{array}$	<p><b>Common Multiple</b> - a number which is a multiple of two or more other numbers.</p> <p><b>Common Factor</b> - a number which is a factor of two or more other numbers.</p> <p><b>Prime Number</b> - a number with no divisors other than 1 and itself.</p> <p><b>Composite Number</b> - a number that can be divided by numbers other than 1 and itself, leaving no remainders.</p> <p><b>Prime Factor</b> - a factor of a number that is also a prime number.</p> <p><b>Linear Sequence</b> - a sequence in which each number increases or decreases by the same amount.</p> <p><b>Ratio</b> - the relative size of two or more parts.</p>
<p><b>Multiplication (x)</b></p> $\begin{array}{r} 3786 \\ \times 48 \\ \hline 30288 \quad (8 \times 3786) \\ + 151440 \quad (40 \times 3786) \\ \hline 181728 \end{array}$	<p><b>Division (+)</b></p> $\begin{array}{r} 26r21 \\ 37 \overline{) 983} \\ - 740 \quad (37 \times 20) \\ \hline 243 \\ - 222 \quad (37 \times 6) \\ \hline 21 \end{array}$ <p><math>983 \div 37 = 26r21</math></p>	

Multiplying Decimals (x)	Place Value
$\begin{array}{r} 7.38 \\ \times 6 \\ \hline 44.28 \\ \hline 4 \quad 2 \quad 4 \end{array}$	

Equivalent Fractions, Decimals and Percentages	Order of Operations (BIDMAS)																																																												
<table border="0"> <tr> <td><math>\frac{0}{10}</math></td><td><math>\frac{1}{10}</math></td><td><math>\frac{2}{10}</math></td><td><math>\frac{3}{10}</math></td><td><math>\frac{4}{10}</math></td><td><math>\frac{5}{10}</math></td><td><math>\frac{6}{10}</math></td><td><math>\frac{7}{10}</math></td><td><math>\frac{8}{10}</math></td><td><math>\frac{9}{10}</math></td><td><math>\frac{10}{10}</math></td> </tr> <tr> <td>0%</td><td>10%</td><td>20%</td><td>30%</td><td>40%</td><td>50%</td><td>60%</td><td>70%</td><td>80%</td><td>90%</td><td>100%</td> </tr> <tr> <td>0</td><td>0.1</td><td>0.2</td><td>0.3</td><td>0.4</td><td>0.5</td><td>0.6</td><td>0.7</td><td>0.8</td><td>0.9</td><td>1</td> </tr> </table> <table border="0"> <tr> <td><math>\frac{0}{4}</math></td><td><math>\frac{1}{4}</math></td><td><math>\frac{2}{4}</math></td><td><math>\frac{3}{4}</math></td><td><math>\frac{4}{4}</math></td> </tr> <tr> <td>0%</td><td>25%</td><td>50%</td><td>75%</td><td>100%</td> </tr> <tr> <td>0</td><td>0.25</td><td>0.5</td><td>0.75</td><td>1</td> </tr> </table>	$\frac{0}{10}$	$\frac{1}{10}$	$\frac{2}{10}$	$\frac{3}{10}$	$\frac{4}{10}$	$\frac{5}{10}$	$\frac{6}{10}$	$\frac{7}{10}$	$\frac{8}{10}$	$\frac{9}{10}$	$\frac{10}{10}$	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1	$\frac{0}{4}$	$\frac{1}{4}$	$\frac{2}{4}$	$\frac{3}{4}$	$\frac{4}{4}$	0%	25%	50%	75%	100%	0	0.25	0.5	0.75	1	<table border="1"> <tr> <td><b>B</b> Brackets</td> <td><math>10 \times (4 + 2) = 10 \times 6 = 60</math></td> </tr> <tr> <td><b>I</b> Indices</td> <td><math>5 + 2^2 = 5 + 4 = 9</math></td> </tr> <tr> <td><b>D</b> Division</td> <td><math>10 + 6 \div 2 = 10 + 3 = 13</math></td> </tr> <tr> <td><b>M</b> Multiplication</td> <td><math>10 - 4 \times 2 = 10 - 8 = 2</math></td> </tr> <tr> <td><b>A</b> Addition</td> <td><math>10 \times 4 + 7 = 40 + 7 = 47</math></td> </tr> <tr> <td><b>S</b> Subtraction</td> <td><math>10 \div 2 - 3 = 5 - 3 = 2</math></td> </tr> </table>	<b>B</b> Brackets	$10 \times (4 + 2) = 10 \times 6 = 60$	<b>I</b> Indices	$5 + 2^2 = 5 + 4 = 9$	<b>D</b> Division	$10 + 6 \div 2 = 10 + 3 = 13$	<b>M</b> Multiplication	$10 - 4 \times 2 = 10 - 8 = 2$	<b>A</b> Addition	$10 \times 4 + 7 = 40 + 7 = 47$	<b>S</b> Subtraction	$10 \div 2 - 3 = 5 - 3 = 2$
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Finding Percentages of an Amount	Adding and Subtracting Fractions			
<p>Use one of these methods to find a <u>percentage of an amount</u>...</p> <table border="1"> <tr> <td> <p><b>Finding 10%</b></p> <p><b>Find 70% of 60</b></p> <ol style="list-style-type: none"> <li>Find 10% by dividing the amount by 10. <math>60 \div 10 = 6</math></li> <li>Multiply this answer by the number of tens in the percentage. <math>6 \times 7 = 42</math></li> </ol> <p><b>70% of 60 = 42</b></p> </td> <td> <p><b>Finding 1%</b></p> <p><b>Find 18% of 250</b></p> <ol style="list-style-type: none"> <li>Find 1% by dividing the amount by 100. <math>250 \div 100 = 2.5</math></li> <li>Multiply this answer by the number of the percentage. <math>2.5 \times 18 = 45</math></li> </ol> <p><b>18% of 250 = 45</b></p> </td> <td> <p><b>Convert to a Decimal</b></p> <p><b>Find 30% of 80</b></p> <ol style="list-style-type: none"> <li>Convert the percentage into a decimal. <math>30 \div 100 = 0.3</math></li> <li>Multiply the amount by the decimal. <math>80 \times 0.3 = 24</math></li> </ol> <p><b>30% of 80 = 24</b></p> </td> </tr> </table>	<p><b>Finding 10%</b></p> <p><b>Find 70% of 60</b></p> <ol style="list-style-type: none"> <li>Find 10% by dividing the amount by 10. <math>60 \div 10 = 6</math></li> <li>Multiply this answer by the number of tens in the percentage. <math>6 \times 7 = 42</math></li> </ol> <p><b>70% of 60 = 42</b></p>	<p><b>Finding 1%</b></p> <p><b>Find 18% of 250</b></p> <ol style="list-style-type: none"> <li>Find 1% by dividing the amount by 100. <math>250 \div 100 = 2.5</math></li> <li>Multiply this answer by the number of the percentage. <math>2.5 \times 18 = 45</math></li> </ol> <p><b>18% of 250 = 45</b></p>	<p><b>Convert to a Decimal</b></p> <p><b>Find 30% of 80</b></p> <ol style="list-style-type: none"> <li>Convert the percentage into a decimal. <math>30 \div 100 = 0.3</math></li> <li>Multiply the amount by the decimal. <math>80 \times 0.3 = 24</math></li> </ol> <p><b>30% of 80 = 24</b></p>	<p>When faced with a <u>mixed number</u>...</p> $1\frac{1}{2} + 1\frac{1}{3}$ $\frac{3}{2} + \frac{4}{3} = \frac{9}{6} + \frac{8}{6} = \frac{17}{6}$ <p>...now <u>change</u> the improper fraction back to a mixed number.</p> $\frac{17}{6} = 2\frac{5}{6}$ <p><b>Multiplying Fractions</b></p> <p>Multiply the numerators, multiply the denominators.</p> $\frac{2}{4} \times \frac{3}{6} = \frac{6}{24} = \frac{1}{4}$ <p>Is your answer in its simplest form?</p>
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