

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

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

Equivalent Fractions, Decimals and Percentages

$\frac{0}{10}$	$\frac{1}{10}$	$\frac{2}{10}$	$\frac{3}{10}$	$\frac{4}{10}$	$\frac{5}{10}$	$\frac{6}{10}$	$\frac{7}{10}$	$\frac{8}{10}$	$\frac{9}{10}$	$\frac{10}{10}$
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

Order of Operations (BIDMAS)

B Brackets	$10 \times (4 + 2) = 10 \times 6 = 60$
I Indices	$5 + 2^2 = 5 + 4 = 9$
D Division	$10 + 6 \div 2 = 10 + 3 = 13$
M Multiplication	$10 - 4 \times 2 = 10 - 8 = 2$
A Addition	$10 \times 4 + 7 = 40 + 7 = 47$
S Subtraction	$10 \div 2 - 3 = 5 - 3 = 2$

Finding Percentages of an Amount

Use one of these methods to find a percentage of an amount...

Finding 10%	Finding 1%	Convert to a Decimal
<p>Find 70% of 60</p> <ol style="list-style-type: none"> Find 10% by dividing the amount by 10. $60 \div 10 = 6$ Multiply this answer by the number of tens in the percentage. $6 \times 7 = 42$ <p>70% of 60 = 42</p>	<p>Find 18% of 250</p> <ol style="list-style-type: none"> Find 1% by dividing the amount by 100. $250 \div 100 = 2.5$ Multiply this answer by the number of the percentage. $2.5 \times 18 = 45$ <p>18% of 250 = 45</p>	<p>Find 30% of 80</p> <ol style="list-style-type: none"> Convert the percentage into a decimal. $30 \div 100 = 0.3$ Multiply the amount by the decimal. $80 \times 0.3 = 24$ <p>30% of 80 = 24</p>

Adding and Subtracting Fractions

When faced with a mixed number...

$$1\frac{1}{2} + 1\frac{1}{3}$$

$$\frac{3}{2} + \frac{4}{3} = \frac{9}{6} + \frac{8}{6} = \frac{17}{6}$$

...now change the improper fraction back to a mixed number.

$$\frac{17}{6} = 2\frac{5}{6}$$

Multiplying Fractions

Multiply the numerators, multiply the denominators.

$$\frac{2}{4} \times \frac{3}{6} = \frac{6}{24} = \frac{1}{4}$$

Is your answer in its simplest form?