



Common Algebraic Expressions

This handout contains common algebraic expressions that can help guide you through formulas and algebraic concepts. For additional assistance with Algebra, make an appointment with an AAC Tutor.

<p>Addition and Subtraction of Fractions</p> $\frac{a}{b} + \frac{c}{b} = \frac{a+c}{b} \quad b \neq 0$ $\frac{a}{b} - \frac{c}{b} = \frac{a-c}{b} \quad b \neq 0$	<p>Addition of Real Numbers</p> $(+3) + (+4) = +7$ $(-3) + (-4) = -7$ $(-3) + (+4) = +1$	<p>Properties of Addition</p> <p>Commutative Property of Addition $a + b = b + a$</p> <p>Associative Property of Addition $(a + b) + c = a + (b + c)$</p>
<p>Properties of Multiplication</p> <p>Commutative Property of Multiplication $ab = ba$</p> <p>Associative Property of Multiplication $(ab)(c) = (a)(bc)$</p>	<p>Strategy for Solving Word Problems</p> <p>Step 1 Read the problem carefully to determine what you are being asked to find.</p> <p>Step 2 Select a variable to represent each unknown quantity. Specify precisely what each variable represents, and note any restrictions on each variable.</p> <p>Step 3 If necessary, make a sketch and translate the problem into a word equation or a system of word equations. Then translate each word equation into an algebraic equation.</p> <p>Step 4 Solve the equation or system of equations, and answer the question completely in the form of a sentence.</p> <p>Step 5 Check the reasonableness of your answer.</p>	
<p>Function Notation</p> <p>The function notation $f(x)$ is read "f of x."</p> <p>$f(x)$ represents a unique output (range) value for each input (domain) value of x. $f(x) \neq f \cdot x$</p>		
<p>Δ Greek symbol to represent change</p> <p>Slope = m</p> <p>Two points on a line $(x_1, y_1) (x_2, y_2)$</p> $m = \frac{y_2 - y_1}{x_2 - x_1} \quad x_1 \neq x_2 \quad m = \frac{\Delta y}{\Delta x}$		

Over →

Academic Achievement Center

For additional help with Algebra, make an appointment with an AAC tutor.
 Tamarack 2nd Floor 588-5088 Columbia College

