

Class Notes #1: Intro to Algebra
Math 60

Recall: Fractions

Example:

<p>Simplify Fractions: A fraction is in simplest terms when the numerator and denominator have _____</p>	$\frac{18}{45}$
<p>To Multiply Fractions: Multiply _____ then multiply _____</p>	$\frac{3}{4} \cdot \frac{5}{6}$
<p>To Divide Fractions: Invert the _____ fraction and then _____ fractions.</p>	$\frac{3}{4} \div \frac{5}{6}$
<p>To Add Fractions: Find the _____, rewrite the fractions with this denominator and then add the _____.</p>	$\frac{3}{4} + \frac{5}{6}$
<p>To Subtract Fractions: Find the _____, rewrite the fractions with this denominator and then subtract the _____.</p>	$\frac{3}{4} - \frac{5}{6}$

Recall: Order of Operations

Simplify: $10 - 3(4 - 9)^2$

P	
E	
M	D
A	S

- If more than one grouping symbol is present, work from inside to out.
- Multiplication and division are completed in order from left to right.
- Addition and subtraction are completed in order from left to right.

Definitions

Variable: A _____ that represents an unknown number is called a variable.

Algebraic Expression: An algebraic expression is a meaningful collection of _____, _____, and _____.

Operations in Algebra

$x + y$	$x - y$	$x \cdot y$ $(x)(y)$ xy	$x \div y$ $\frac{x}{y}$

Question 1:

Translate the following phrases into algebraic expressions.

- Five less than twice a number.
- There are 48 cookies and the class ate C cookies. How many cookies are left?
- Donna drove her truck at 55mph for t hours. How far did she travel?
- If x is an integer, what is the next consecutive integer?
- If x is an even integer, what is the next consecutive even integer?
- If x is an odd integer, what is the next consecutive odd integer?
- John had \$150 before spending P dollars on pizza. How much money remains?
- If Frank has \$455 in his account and he spent G dollars on gas, what is the amount of money left in his account?