

Pre-Algebra outline

Essentials of Algebra

Expressions and variables

Order of operations

Comparing and ordering integers

Adding integers

Subtracting integers

Multiplying and dividing integers

Properties and operations

Distributive property

Simplifying variable expressions

Rational numbers

Adding and Subtracting like fractions

Adding and subtracting unlike fractions

Multiplying fractions

Dividing fractions

Use multiplicative inverses to solve equations

Equations and inequalities with rational numbers

FIRST DEGREE EQUATIONS & INEQUALITIES

Variables and equations

Solving equations and inequalities using addition and subtraction

Solving equations and inequalities using multiplication and division

Decimal operations and equations with decimals

Solving two-step equations/inequalities

Solving equation and inequalities having like terms and parentheses

Solving equations and inequalities with variables on both sides

GRAPHING LINEAR FUNCTIONS & RELATIONS

Relations and functions

Linear equations in two variables

Using intercepts

Slope of a line

Slope – intercept form

OPERATIONS WITH ALGEBRAIC EXPRESSIONS

Polynomials

Adding and Subtracting polynomials

Multiplying monomials and polynomials

Multiplying binomials

SPECIAL PRODUCTS & FACTORING

Factors and prime factorization

Greatest common factor

Equivalent fractions

Least common multiple

PERIMETER, AREA & VOLUME

Polygons and quadrilaterals

Areas of parallelograms and trapezoids

Circumference and area of a circle

Surface area of prisms and cylinders

Volumes of prisms and cylinders