

## ST. LUKE'S SCHOOL

**Course Name:** Pre-Algebra

**Instructor's Name:** Nancy Knewstep

**About the Teacher:** I received my B.S. from Virginia Polytechnic Institute and State University and have taken a number of continuing education classes during the ensuing years. My previous teaching experiences include Headstart in Fairbanks, Alaska, and teaching the gifted elementary program at Orange Elementary, as well as day care work and working with special education. This will be my 24th year with St. Luke's. My daughter Lindsey is a graduate of St. Luke's and is attending Jefferson College of Health Sciences in Roanoke, VA.

**Contact Information:** Planning at school: 4<sup>th</sup> and 5<sup>th</sup> period  
School: 825-1776, ext. 54  
Email: nknewstep@stlukes-school.corg  
Home: 6-9 p.m.-School Directory

**Textbook:** McDougal Littell *Pre-Algebra*

**Method of Delivery:** Lecture, notes, discussions, cooperative learning

### Course Content

Integers- add, subtract, multiply, divide

Variables and Expressions- order of operations, properties, area, and perimeter formulas

Equations and Problem Solving

Number Theory- factors, divisibility, primes, exponents, LCM, GCF,

Fractions- multiplication, division, mixed numbers, reciprocals

Probability- ratio, proportion, independent and dependent events

Decimals- rational numbers, repeating decimals

Percent- decimals and percent, interest, discount

Analyzing Data- stem and leaf plots, box and whisker plots

Inequalities- solving inequalities

Coordinate Plane- coordinate graphs, linear equations, slope

Square Roots and Right Triangles- using square roots, Pythagorean Theorem

Polynomials- adding, subtracting polynomials

### Learning Goals

- Know how to write and solve algebraic expressions, equations, and inequalities
- Know how to set up proportions
- Know how to recognize and graph linear functions and systems of linear equations. Students will also apply the following terms to linear equations: slope, parallel, and perpendicular.

- Memorize and solve key algebraic and geometric formulas.
- Know how to solve expressions by combining like terms, using exponent rules and properties of square roots.
- Be able to determine rational and irrational numbers, as well as, ordering them.

### **Assignments, Evaluation and Grading Policy**

**Homework**-- Homework is for student practice and self evaluation of material covered. Students are expected to complete all homework assignments. If a student is having difficulty with the homework he/she should contact me before class. Class participation and completion of homework is taken into consideration for the overall grade.

**Speed Drills**-- administered every Friday and are 10% of their grade

**Quizzes**-- generally administered mid-chapter

**Tests**-- administered at the end of each chapter.

**Midterm**- 8<sup>th</sup> grade only 1<sup>st</sup> semester 10% of 1st semester average

**Final**-8<sup>th</sup> grade only 2<sup>nd</sup> semester 20% of 2<sup>nd</sup> semester average

**Grading Scale:** School Policy