

# Mathematics 8

## Mr. C's Math Class

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### Objective:

- To enjoy mathematics, develop curiosity and begin to appreciate its elegance and power
- To prepare students for Algebra 1 in 9th grade
- To build on previous years' instruction into statistics, geometry, graphing and the number system
- To push students to the limits of their abilities by helping and scaffolding them along the way

Textbook: Glencoe Math - Course 3

### Road Map

**Unit 1** - What do we need to know about **The Number System** to be ready for the future?

- Real Numbers

**Unit 2** - What does the equal sign really mean? (**Expressions and Equations**)

- Equations in One Variable
- Equations in Two Variables

**Unit 3** - What is a **Function**?

- Functions

**Unit 4** - Are these two objects similar or congruent? (**Geometry**)

- Triangles and the Pythagorean Theorem
- Transformations
- Congruence and Similarity
- Volume and Surface Area

**Unit 5** - How can **Statistics and Probability** allow us to better understand large data sets?

- Scatter Plots and Data Analysis

#### Class Structure:

1. **Warm up** - Review concept from yesterday, apply it in an unfamiliar situation, and transfer that knowledge to the new concept for the day
  2. **Homework Review** - We go over homework from the previous day
  3. **Lesson** - New material for the day
  4. **Homework time** - Practice on new material. Due the next class day. Complete as much as possible in class.
- 20 point quiz **every** Friday
    - Your homework from the week can be used as a reference
  - 100 point test at the end of each chapter

#### IB in Math

- As St. Luke transitions into an IB school, IB summative assessments are going to replace traditional tests and projects.
- In math, these assessments will test students on 4 Criterion:
  - Criterion A: Knowing and Understanding
  - Criterion B: Investigating Patterns
  - Criterion C: Communication
  - Criterion D: Application in Real Life Situations
- Approaches to Learning - We will additionally be working on the following study skill areas:
  - Communication, social, self management, research, and thinking

#### Additional Assignments:

- 50 point ALEKS assignments due on the first of the Month
  - ALEKS requirement is 20 topics learned per Month (ALEKS will inform you when you have completed the requirement)
- 25-50 point projects occasionally
- Extra credit opportunities

#### Supplies:

- Spiral Notebook for homework, note taking, and warm-up problems
- Folder for loose papers, tests, and other handouts
- Pencils and Pens
- Scientific Calculator (TI-30 recommended)
- Computer and internet access at home