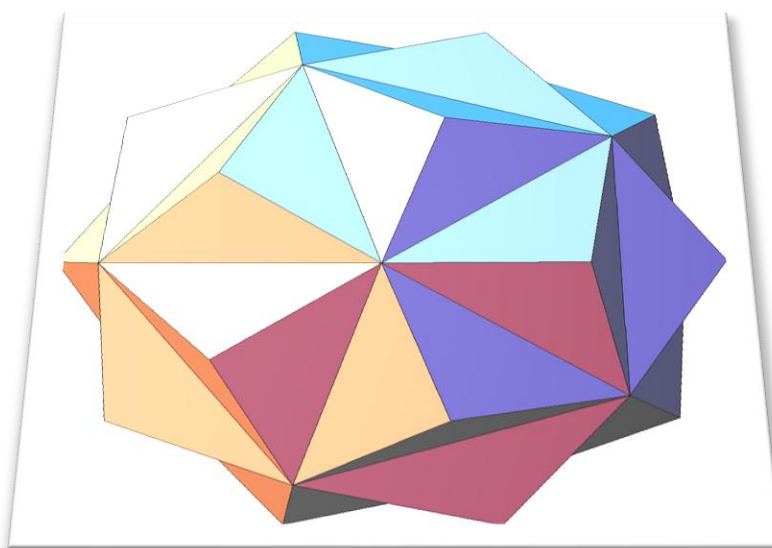**Email:** suddi_a@surreyschools.ca | **Room #:** Portable 2

Course Outline

MATH 9

Required Materials:

- ❖ 1 ½ - inch, 3 Ring Binder
- ❖ 3 hole punched lined paper
- ❖ 3 hole punched graphing paper
- ❖ Binder dividers for each unit (8)
- ❖ Pencil, eraser, blue or black pen, red pen, ruler, highlighters.
- ❖ Scientific Calculator

Course Topics:

Unit 1: Rational Numbers

Unit 2: Similarity & Scale Factors

Unit 3: Powers, Exponents, & Square Roots.

Unit 4: Polynomials

Unit 5: Linear Relations

Unit 6: Solving Linear Equations

Unit 7: Banking & Budgeting

Unit 8: Data Analysis

Policies & Expectations:

PUNCTUALITY: Please come to class well in advance and be ready to begin as soon as the bell rings.

1. First Offense = Warning

2. Second Offense = Detention

3. Third Offense = Phone call home

CELLULAR DEVICES: Cell phones are to be turned off and stored in your backpack at all times during class, unless otherwise directed.

- First Week Offence = Warning

- After First Week = Confiscation

- Frequent Offences = Phone call home

FOOD/DRINK: Food and drink are permitted in the classroom. Water in a re-sealable container is acceptable. However, if not cleaned up after, this privilege will be revoked.

ASSESSMENTS: If you miss a Unit Test you will have to wait until the next scheduled makeup test day. You may retake up to 1 test during the semester.

- I will discount your lowest test score throughout the semester.

CHEATING: No warnings. First offense will result in a phone call home and further consequences.

Assessment Practices:

You will be formatively assessed (not part of your grade) during classroom activities. Self-reflections and feedback from your instructor will help you identify areas where you need to improve.

You will be summatively assessed (part of your grade) based on your in-class participation and engagement with course materials/activities, homework completion, frequent quizzes, unit tests, a mid term, and a final exam.

Percentage Breakdown:

Participation = 5% | Quizzes = 15% | Unit Tests = 40% | Mid Term = 20% | Final = 20%

Curriculum:

BIG IDEAS: The curricular "Big Ideas" in mathematics outline the overarching themes that students will explore and conceptualize. The Big Ideas are what students will understand by the end of the course.

- ❖ The principles and processes underlying operations with numbers apply equally to algebraic situations and can be described and analyzed.
- ❖ Computational fluency and flexibility with numbers extend to operations with rational numbers
- ❖ Continuous linear relationships can be represented in many connected ways to identify regularities and make generalizations.
- ❖ Similar shapes have proportional relationships that can be described, measured, and compared.
- ❖ Analyzing the validity, reliability, and representation of data enables us to compare and interpret.

CURRICULAR COMPETENCIES: The curricular competencies are integrated through classroom activities and assignments. They highlight what students are expected to do throughout the course.

Reasoning & Analyzing	Understanding & Solving
✓ Using logic and reasoning to analyze problems and draw conclusions	✓ Developing a variety of strategies to explain, clarify and justify mathematical understanding.
Communicating & Representing	**Connecting & Reflecting**
✓ Communicate in a variety of ways (concretely, pictorially, symbolically) to explain and clarify mathematical ideas	✓ Apply and connect mathematical concepts to other disciplines and to the real world.

CONTENT COMPETENCIES: The content competencies are what students are expected to know by the end of the course.

- ❖ Operations with rational numbers (addition, subtraction, multiplication, division, and order of operations)
- ❖ Exponents and exponent laws with whole number exponents
- ❖ Operations with polynomials, of degree less than or equal to 2
- ❖ Two-variable linear relationships, using graphing interpolations, and extrapolation.
- ❖ Multistep one-variable linear equations.
- ❖ Spatial proportional reasoning.
- ❖ Statistics in society
- ❖ Financial literacy – best buys (e.g., coupons, proportions, unit price, products, and services)

Classroom Rules:

1. Treat others as you wish to be treated.

2. Be supportive by giving others your attention when they speak. Use your hand and wait your turn to speak.

3. Be encouraging of other students' thoughts, feelings, and ideas. Be inclusive of other students during group activities.

4. Use respectful language. Use English during class time.

5. Use constructive language when providing feedback or disagreeing with other peoples' opinions.

6. Work diligently on assignments and don't distract others when they are trying to focus on their work.

7. Come to class on time so that you don't disrupt the rest of the class.

8. Come to class prepared to participate in activities and ready to contribute to discussions.

9. Hand in assignments on time.

10. Be respectful of your environment. Clean up after yourself.

11. Be accountable for your own learning. Ask for help when you need it.

12. Come to class with a positive attitude each day and be ready to step outside of your comfort zone.