

Mathematics 9

Teacher: Mr. Ng
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Course Material: *Mathlinks 9, handouts, course website*

Required: Pencil, Scientific Calculator, Ruler, Graph Paper

Course Content

Unit 0 Review: Integers, fractions, square and cube numbers

Unit 1 Rational Numbers

- Add and Subtract Rational Expressions
- Multiply and Divide Rational Expressions
- Order of Operations with Rational Numbers

Unit 2 Powers and Exponent Laws

- Power of Ten and the Zero Exponent
- Order of Operations with Powers
- Exponent Laws

Unit 3 Algebra

- Distribution
- Collecting like-terms
- Solving variables on both sides of equations

Unit 4 Polynomials

- Model polynomials
- Like terms and unlike terms
- Add and subtract polynomials
- Multiply and divide polynomials by a constant
- Multiply and divide polynomials by a monomial

Unit 5 Linear Relations

- Two variable continuous linear relations
- Horizontal and vertical line graphs
- Graph and analyze relations
- Use graphs to estimate values (interpolating, extrapolating)

Unit 6 Geometry

- Surface area and volume of regular solids, triangular prisms, right prisms, and cylinders
- Object nets
- 3D object views

Unit 7 Similarity and Scale Diagrams

- Scale diagrams (enlargement, reduction)
- Similar polygons and triangles

Unit 8 Financial Literacy

- Simple Interest ($I=Prt$)
- Understanding banking statements (debits, credits)
- Balanced Budget (income, savings, expenses, planned purchase)

Unit 9 Data Analysis and Statistics

- Potential problems with collecting data (bias, use of language, ethics, cost, time and timing)
- Use samples and populations to collect data
- Sampling techniques, misleading stats
- Analyze a given set of data and identify potential problems

Classroom Expectations and Procedures

- **Regular attendance:** Students who are absent (illness, school activities, vacation, etc.) are expected to catch up on any missed work, quizzes and tests.
- **Arrive on time with all necessary materials** (textbook, scientific calculator, handouts, paper, pencil, etc.).
- **Make use of class time** to complete assigned work as students are expected to complete assigned work by the next class.
- Come in for **extra help**, if needed. Do not wait until the day before the test. Morning tutorials are available everyday.
- Absolutely **no cell phones** as a school-wide policy.
- MP3 players, I-pods, and other electronic devices are not permitted in class, unless expressly stated by the teacher.
- Treat all members of the classroom with **respect and consideration**.

How to Find Me

Most of my course content is found on my school website at <https://ngwindsor.weebly.com/>. I'm available to be reached digitally via MS Teams as 'Anthony Ng' as well as through my email at ang@sd44.ca. My classes are often in Room A316 or E507 so I can also be called through the school telephone directory in an emergency at 604-903-3700. I can be physically reached inside the school either during morning tutorial time from 8:30-9:10am every weekday in Room E507, at lunch in Room E507, as well as after 3pm on certain days. For after-school times, it is best to set up a meeting time prior to the date you would like to meet because I may have meetings or prior engagements and thus be unavailable on certain dates.