

## Mathematics 9 - Course Outline

### Mr. Sloan - Parkside School

#### Introduction:

Mathematics is a common human activity, increasing in importance in a rapidly advancing, technological society. A greater proficiency in using mathematics increases the opportunities available to individuals. Students need to become mathematically literate in order to explore problem – solving situations, accommodate changing conditions, and actively create new knowledge in striving for self-fulfillment.

The main goals of Mathematics 9 are to prepare students to:

- Develop meanings and representations for number and operations
- Look for and use multiple relationships among numbers and operations
- Understand computational strategies and use them appropriately and efficiently
- Make sense of numerical and quantitative situations.

At the completion of this program, students should have developed a positive attitude towards mathematics and have a base of knowledge and skills related to Number Concepts, Patterns and Relations, Shape and Space, and Statistics and Probability.

#### Units:

CHAPTER	CLASSES	APPROXIMATE DATES
Chapter 1 – Symmetry and Surface Area	14	September 2 - September 19
Chapter 2 – Rational Numbers	18	September 22 - October 20
Chapter 3 – Powers and Exponents	16	October 21 – November 14
Chapter 4 – Scale Factor and Similarity	16	November 17 – December 8
Chapter 11 – Data Analysis	4	December 9 – December 12
<b>Multi-Chapter Review &amp; Test (Chapters 1-4)</b>		December 15-19
<b>Christmas Break</b>		December 20 - January 4
Chapter 5 – Intro to Polynomials	15	January 5 – January 23
Chapter 6 – Linear Relations	12	January 26 – February 10
Chapter 7 – Multiplying and dividing Polynomials	15	February 11 - March 10
Chapter 8 – Solving Linear Equations	15	March 11 – April 1
<b>Multi-Chapter Review Test (Chapters 5-8)</b>		April 2 (Tentative)
Chapter 9 – Linear Inequalities	14	April 13 – May 1
Chapter 10 – Circle Geometry	15	May 4 – May 26
Year Review	*	May 27 – End of Classes
Final Exams (Part A and Part B)	2	June date TBA

**Assessments:**

<u>Assessment Methods</u>	<u>Final Grading</u>	<u>Instructional Methods</u>
<ul style="list-style-type: none"> <li>● Daily assignments</li> <li>● Bellwork</li> <li>● Online Check-ins/Exit Slips</li> <li>● Quizzes</li> <li>● Projects</li> <li>● Tests</li> <li>● Final Exam</li> </ul>	<p><b>Each Unit:</b>  Assignments = 20%  Quizzes = 30%  Tests/Projects = 50%</p> <p>-----</p> <p>Course Work - 80%  <ul style="list-style-type: none"> <li>● Each Term is worth 26.7%</li> </ul> Final Exam (PAT) - 20%</p>	<ul style="list-style-type: none"> <li>● Formal Lecture</li> <li>● Self-discovery</li> <li>● Peer Support</li> <li>● Mentoring</li> <li>● Co-operative</li> <li>● Project Based Learning</li> </ul>

**Chapter Tests:**

There will be 10 Chapter Tests (No test for Chapter 11) given at the end of each chapter. Each test will be a written paper/pencil exam consisting of written response, multiple-choice questions and some no calculator questions depending on the chapter. **Students can rewrite any tests ONE TIME.** The test will be different but the material will be the same. I will always use the higher mark for their grade.

**Quizzes:**

There will always be a quiz after the “.2” section of every chapter, but there will be more random quizzes that will be given with or without notice. Quizzes will follow similar structures to tests with multiple choice and short answer questions. Quizzes can be rewritten at any time.

**Multi-Chapter Review Tests:**

There will be two multi-chapter review tests that will cover multiple chapters of the curriculum. These tests may be formatted the same as the PAT in preparation for the final exam, which means that they may have a Part A (calculators are not allowed) and Part B (Calculators are allowed). The first test will be reviewing Chapters 1-4. The second will be reviewing Chapters 5-8. There are no rewrites for these tests.

**Assignments:**

There will be Assignments/Projects throughout the year that will be for more marks. All assignments will be due the day after handing them out unless otherwise posted. There will be class time provided for these. Corrections can be done on assignments for extra marks. However, the work must be shown and an explanation must be given to Mr. Sloan as to why the correct answer is correct. If I suspect that a student just copied their work from another student, I may not award extra marks.

**Grade 9 Provincial Achievement Test: (Final Exam)**

There will be a Grade 9 Government Achievement Test at the end of this course. This exam will consist of a Part A and a Part B. Part A is a no calculator exam that is not multiple Choice. Part B contains multiple choice and numerical response type questions and students are allowed a calculator. The exam will cover all the material learned throughout the semester.

**Homework:**

Math 9 is a challenging course, it is presumed that if students work hard in class, they should have little to no homework. Working in class is always preferred as the teacher is able to help students when needed. Daily textbook work will never be for marks as it is considered practice for the “big game” (Assignments and Chapter Tests). However, if assignments are not completed, students will be in at lunch or after school to complete the work. If students are continually not completing assignments, parents will be contacted and arrangements will be made to ensure the math work is more of a priority.

**Notebook:**

Each student will be required to keep a neat and orderly notebook/binder. It is the student’s responsibility to copy all notes and examples off the board into their notebooks, during class time. All assignments and notes can be found in Google Classroom. **Each student is also responsible for making their own daily notes on each topic.** All notes and assignments **must be kept** until after the final exam. If you are absent, you are responsible for getting the notes and examples from a classmate (homework buddy). It is also your responsibility to attempt the assignments and then come to the teacher if you are having any difficulties.

**Textbook:**

We use the Mathlinks 9 textbook. I will have physical copies in my classroom for students to use but there is an online version that is on Google Classroom.

**Student Materials:**

- Three – ring binder
- Lined paper
- Dividers
- Graph paper
- **Calculator (Basic Scientific Calculator is preferred)**
- Pencils - MANY
- Eraser
- Chromebook

**CLASSROOM RULES AND REGULATIONS:**

1. Be **on time** with all the proper materials needed (notebook, pencil, chromebook and **calculator** need to be brought to EVERY class)
2. Come in, sit down, and start the bellwork question on the board.
3. Students must get permission to leave class for any reason.
4. Daily Math Assignments are due for the next class unless otherwise stated by the teacher.
5. No one is allowed to leave the room during an exam unless it is an absolute emergency.
6. Students are to work until the bell and should not be packing up until all of the work is completed or the teacher gives permission.

7. Cell phone use is **not** permitted in the classroom. Students will either leave their phones in their lockers or leave them in a bin at the front of the room to be picked up at the end of class. This means that you cannot use your cell phone as a calculator. You **must** have an actual calculator.
8. Missing assignments of one week will result in students being required to go to homework club at lunch time until they are caught up and meeting with Mr. Sloan during TAG time.

**The most important action that you can do in math class is to  
Ask Questions!**

**I am always available for extra help! I'll be available before school and  
at lunch for any questions you may have!  
After school help by appointment only!**

**At this time you need to sign up for Math 9 in Google Classroom. The class code will be shown in class. If you are absent the first day and require it, send me an email.**

**Google Classroom is an App/Site that allows students and parents to access all the math information on your phone, tablet, or computer. It contains all notes and practice so if students forget their math at school, they will still be able to work from anywhere. This will also be key for students if they are sick and must be at home for a few days.**