

Math 10F

Course Code: 0080**Credit Value: 1.0 credits****Miss Doran sdoran@trsd.ca**

Prerequisites: none, although successful completion of K-8 math courses are strongly encouraged.

Required Materials and Recommended Resources:

Required: binder, pencils, eraser, lined paper, basic scientific calculator (students will NOT be allowed to use their device as a calculator on formal tests or exams)

Textbook: MathLinks 9 (McAskill et. At.; McGraw-Hill Ryerson, 2008)

Other resources to be used as supplementary material

Course Description and Goals

Math 10F is designed to give students the basic skills required to move forward into any of the three streams of math they will find in higher grades: Pre-Calculus, Applied, and Essentials. Students will continue to build on their mental math skills as well as calculator skills. Number sense, space and shape, statistics and probability, and patterns and relations will be focused on.

Goals of Course

The main goals of mathematics education are to prepare students to

- communicate and reason mathematically
- use mathematics confidently, accurately, and efficiently to solve problems
- appreciate and value mathematics
- make connections between mathematical knowledge and skills and their applications
- commit themselves to lifelong learning
- become mathematically literate citizens, using mathematics to contribute to society and to think critically about the world

Summary of Four Main Topics

Number Sense: develop number sense

Patterns and Relations: use patterns to describe the world and solve problems

Shape and Space: use direct or indirect measurements to solve problems

Statistics and Probability: collect, display, and analyze data to solve problems

Special Programming: mRLC

Turtle River School Division is part of the Manitoba Rural Learning Consortium (mRLC). The purpose of being part of this team is to improve and track student understanding and ability of mathematic knowledge in various grades. The mRLC has developed a pacing guide with the essential outcomes taught from September to mid November, and the other outcomes are covered later in the semester. To help track student understanding of the material, there are 4 quizzes that students are asked to write. All four quizzes are based on the essential outcomes, and are meant to give students and the teacher a better understanding of what needs more review. In January, students are asked to write a Baseline Assessment, where the results are recorded by the division. *All parents/guardians have the option to allow their students to opt out of this baseline assessment.* This baseline and the quizzes will not count toward student grades.

Schedule	Topics covered
September	
Review of Grade 8 Concepts	
Chapter 2: Rational Numbers	Comparing and Ordering Rational Numbers; Problem Solving with Rational Numbers in Decimal Form; Problem Solving with Rational Numbers in Fraction Form; Determining Square Roots of Rational Numbers
Chapter 3: Powers and Exponents	Using Exponents to Describe Numbers; Exponent Laws; Order of Operations; Using Exponents to Solve Problems
Chapter 5: Introduction to Polynomials	The Language of Mathematics; Equivalent Expressions; Adding and Subtracting Polynomials
October	
Chapter 7: Multiplying and Dividing Polynomials	Multiplying and Dividing Monomials; Multiplying Polynomials by Monomials; Dividing Polynomials by Monomials
Chapter 8: Solving Linear Equations	Solving One-Step Equations; Solving Two-Step Equations; Solving Equations with Brackets; Solving Equations with Variables on Both Sides of the Equation
Chapter 6: Linear Relations	Representing Patterns; Interpreting Graphs; Graphing Linear Relations
November	
Chapter 9: Linear Inequalities	Representing Inequalities; Solving Single-Step Inequalities; Solving Multi-Step Inequalities
Chapter 4: Scale Factors and Similarity	Enlargements and Reductions; Scale Diagrams; Similar Triangles; Similar Polygons
Chapter 1: Symmetry and Surface Area	Line symmetry; Rotation Symmetry and Transformations; Surface Area
December	
Chapter 10: Circle Geometry	Exploring Angles in a Circle; Exploring Chord Properties; Tangents to a Circle
Chapter 11: Data Analysis	Factors Affecting Data Collection; Collecting Data; Probability in Society; Developing and Implementing a Project Plan
January	
- Review - Formative Quizzes - Baseline Assessment - Final Exam	

Assessment

Student Evaluation

Formative Assessments:

- "Warm-up" assignments
- "Show you know" questions
- mRLC Quizzes
- Extra Practice
- Review packages
- Baseline Assessment

Summative Assessments:

- Chapter Assignments
- Chapter Tests
- Final Exam

Breakdown of Marks

Coursework (tests & assignments): 70%

Final Exam: 30%

Coursework and exam will be marked using a key based on final answers and work shown. Students are expected to show work to have the possibility of gaining full marks on questions.

Guidelines

Homework Policy

- Homework will be assigned regularly in order to complete all course requirements by the end of the semester.

Incomplete Work

- Following the deadline of any assignment, the student's mark will be recorded as a zero. Upon completion of the assignment, it will be graded and recorded. At reporting periods, a final deadline will be given for the evaluations to take effect on the report card for that reporting period.

Rewrites

- Students may be able to request a rewrite of a test or assignment if they have shown sufficient work to prepare for the rewrite. This includes a minimum of two (2) tutoring sessions during the lunch hour. A rewrite will only happen if it is agreed upon by the teacher and student, and if necessary, the parent and/or administration.
- A maximum of 3 rewrites can be requested through the course. These 3 rewrites do not include any assignment questions the student is asked to redo by the teacher

Plagiarism

"Students must understand that the tests/exams they complete and the assignments they submit as evidence of learning must be their own work and that cheating and plagiarism will not be tolerated..." (*Provincial Assessment Policy, K-12*)

"Academic dishonesty could result in one or all of the following: contacting the parents, documentation of the incident in the student's file, report this behavior on the report card, enforce loss of privileges for the student, disciplinary measures, redo the work and deduct marks for academic dishonesty.... If a student is found to be engaging in academic dishonesty, the principal will follow the school and division policy which may result in further consequences as deemed appropriate by the principal." (*TRSD Instructional policy manual*)

Extra Help

- If students need extra help, Ms. Doran is available during the lunch hour
- If needed, Ms. Doran is willing to make arrangements to stay after the regular school day for extra help: this must be arranged in advance with parent/guardian permission.

Classroom Expectations

- Attendance and Absence
 - Students are expected to attend class regularly.
 - Students who arrive in class after 1:00 will be marked as LATE
 - Students who arrive with 15 minutes or less left in class will be marked as absent
 - Students who are absent for class are responsible for gathering missed work and asking questions.
- All members of the classroom community are expected to be polite and respectful to all staff, students, and property in the classroom. If necessary, a student may be asked to leave the room for a break or to check in with another staff member until they are ready to join the class and respectfully participate.
- Use of Personal Devices
 - Devices and accessories (including but not limited to cell phones, headphones, ear buds, tablets, and smart watches) must be turned off and put out of sight during teacher instruction. Devices are NOT to be used as calculators. All students are required to have a basic scientific calculator to use during class, on tests, and on the exam.
 - If students cannot comply with the technology expectations, their device will be placed in a safe location until the end of class.
- Snow Days / No Bus Days
 - Due to the amount of material required to be completed during the course, students may be expected to complete homework as assigned in case of inclement weather or days where no buses run

- Final Exam
 - All students are expected to write the final exam on the scheduled day
 - Failure to attend the final exam will result in a 0 (zero) unless there are exceptional circumstances, which may include bereavement or medical emergencies. If no notice is given for non-attendance on an exam day and no valid reason is provided within a reasonable time frame, you may not be allowed to write the exam.
 - Students are not to have devices on their person while writing the exam. Any use of these devices during an exam will result in a mark of 0 (zero)

Student Signature: _____

Date: _____

Parent/Guardian Signature: _____

Date: _____