**Grade 10 Essential Mathematics**

*Ste. Rose School Miss K. Orr Sept. 2025 – Jan. 2026*

*Course code: 3000*

*Credit Value: 1.0*

**Communication**

**e-mail:** [korr@trsd.ca](mailto:korr@trsd.ca)

**Phone:** 204-447-2088 (school)

***Microsoft teams*** *will be used throughout the year as the main communication and organizational medium between the teacher, students and parents.*

***The code for this class is:*** *dfj8ge3*

**Course Description**

Grade 10 Essential Mathematics (20S) will develop critical-thinking skills by analyzing puzzles and games involving spatial reasoning. They will develop spatial sense through direct and indirect measurement, and they will demonstrate an understanding of the Système International (SI) and the American and British imperial systems by describing the relationships for units of length, area, volume, capacity, and mass. Learners will convert units of measurements between all systems, and they will manipulate and apply formulas involving perimeter and area. They will develop spatial sense relating to triangles by demonstrating an understanding of manipulating and applying formulas related to the Pythagorean Theorem and the primary trigonometric ratios, as well as an understanding of transformations, angles, and lines. Learners will demonstrate an understanding of employment earnings by calculating gross and net pay, as well as manipulating and applying formulas related to income. They will develop skills to make informed consumer decisions using proportional reasoning involving unit pricing and currency exchange.

**Course Content**

***Unit 1:* Analysis of Games & Numbers** *(throughout the semester)*

* *Analyze puzzles & games*

***Unit 2:* Personal Finance** (4 weeks)

* *Wages*
* *Salary*
* *Contracts*
* *Commissions*
* *Piecework*
* *Problem solving*

***Unit 3:* Consumer Decisions** (1 week)

* *Unit Pricing*
* *Currency exchange*

***Unit 4:* Measurement** (3 weeks)

* *Imperial length measurements (length, are, volume, capacity and mass)*
* *SI (metric) length measurements (length, are, volume, capacity and mass)*
* *Converting measurements*

***Unit 5:* Geometry** (2 weeks)

* *Imperial and SI (metric) measurements of regular, composite and irregular 2-D shapes*
* *Perimeter and area*

***Unit 6:* Angle Construction** (3 weeks)

* *Understanding angles (acute, right, obtuse, straight and reflex)*
  + *Draw, Replicate/construct, Bisect*
  + *Solve problems: parallel, perpendicular and transversal lines (angles formed between them)*

***Unit 7:* Trigonometry** (3 weeks)

* *Right triangles, Pythagorean theorem, Similarity and scale, Tangent ratio, Sine and cosine ratios*
* *Determining unknown angles*

***Unit 8:* Transformations** (3 weeks)

* *Translations*
* *Rotations*
* *Reflections*
* *Dilations*

**Evaluation**

**Course Work 70%**

**Final Exam 30%**

***There will be a cumulative Final Exam during the January exam week worth 30% of your final grade.*** *This will be written as per exam policy in the Ste. Rose School Student Handbook.*

**Required Materials**

* Binder
* Loose Leaf
* Pencils/Pens (both red & blue)
* Textbook (*10 Math at Work*)
* Calculator
* Laptop

**Policies, Procedures & Notices:**

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| **Responsibility**   1. If you are absent, you are responsible for finding out what you have missed. The majority of documents should be available for you on Microsoft Teams, however if paper copies were provided in class, there will be a copy for you in a predetermined location. Please come see me if you have questions regarding what you have missed. *Note: students are expected to follow the Ste. Rose School Attendance Policy.*    1. **Late Policy:** You will be considered late if you arrive after the bell. You will be considered absent if you arrive more than 10 minutes late.    2. **Absent Policy:** Your parents will be receiving an email/phone call/letter if you are absent 5 times this year. They will be receiving another email/phone class/letter if you have absent 10 times. If you are absent more than 10 times, a parent meeting will need to be scheduled in order for you to continue with this class. 2. Come to class **ON TIME & PREPARED** with your **laptop,** binder, notebooks, writing utensils, calculator & any other items you might need. 3. This classroom will be one where everyone is comfortable to ask questions and state their opinions. Therefore, everyone is expected to **treat others with respect.** Inappropriate comments will not be permitted. 4. Go to the washroom prior to class AND ensure your water bottle is filled. |
| **Assessment & Grading**  All of the graded assignments, projects, tests, and discussion will be graded according to the student’s ability to meet the Manitoba curriculum outcomes. Both formative and summative assessment tools will be used. To obtain an overview of the curricular outcomes go to the link below or contact Miss Orr. <https://www.edu.gov.mb.ca/k12/framework/english/math/grade_10/essential_full.html> |
| **Miss Orr’s Late Assignment Policy**  ***Time management*** and having the ability to***meet due dates*** is an extremely important skill. Assignments are expected to hand in assignments on the due date. Late assignments will only be accepted at the teacher’s discretion. **It is up to the student to communicate with the teacher** if they cannot complete the assignment on the expected due date.   * Upon a student not meeting a due date, communication will occur via email to the student, parents, and principal noting **steps to move forward.** * Work not submitted on time with no plan of action will be **marked as a zero.**   ***Note: All due dates in MY COURSES are at 3:30pm.*** |
| **Cell phones**  As per the Manitoba government and Turtle River School Division’s policy, no cell phones will be allowed **during class time**, unless directed for educational purposes by your teacher. |
| **Academic Dishonesty**  The Ste. Rose School Handbook outlines the expectations in regards to academic dishonesty. If at any  time you are unsure about an assignment it is the student’s responsibility to ask for clarification, attendance and the use of technology.   * **1st offence:** The student will receive a zero (0) on the assignment. A phone call/email will be sent to the parent/guardian. * **2nd offence:** A letter will also be sent home to the parent/guardian. The parent/guardian must sign the letter and return it to the school. The Student will receive a zero (0) on the assignment. * **3rd offence:** The student will receive a zero (0) on their assignment and they will be referred to the principal for further disciplinary action. A meeting will need to be arranged with the parent/guardian to address the severity of this issue. |
| **Extra Help**  If you require extra help, please come see me directly to set up a time that will work for both of us. Do not hesitate to reach out to me if you have any questions or concerns about the material we are covering. |