CROCUS PLAINS REGIONAL SECONDARY SCHOOL

COURSE OUTLINE AND ASSESSMENT GUIDE

Pre-Calculus Mathematics (MAP30S)

Teacher's Name(s):   Mr. Patel

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Course Description: *Grade 11 Pre-Calculus Mathematics (30S) is designed for students who intend to study Calculus and related mathematics as part of post-secondary education. It builds on the topics studied in Grade 10 Introduction to Applied and Pre-Calculus Mathematics and provides background knowledge and skills for Grade 12 Pre-Calculus Mathematics.*

Textbook/Workbook: Pre-Calculus 11 my Worktext (Pearson)

Units of Study

Unit Title	Learning Outcomes *It is expected that students will:*	Assessment Plan	Proposed Time
Sequence & Series	1.1 Arithmetic Sequences 1.2 Arithmetic Series 1.3 Geometric Sequences 1.4 Geometric Series 1.5 Infinite Geometric Series	**Formative Assessment** May include Mental Math, Text Exercises, Observation, and Participation **Summative Assessment**: Tests, Assessment Activities	10 days
Absolute Value & Radicals	2.1 Absolute value of a Real number 2.2 Simplifying Radical Expressions 2.3 Adding and Subtracting Radical Expressions 2.4 Multiplying and Dividing Radical Expressions 2.3 Solving Radical Equations	**Formative Assessment** May include: Mental Math, Text Exercises, Observation, and Participation **Summative Assessment**: Tests, Assessment Activities	12 days

Solving Quadratic Equations	3.1 Factoring Polynomial Expressions 3.2 Solving Quadratic Equations by Factoring 3.3 Using Square Roots to Solve Quadratic Equations 3.4 Developing and Applying the Quadratic Formula 3.5 Interpreting the discriminant	**Formative Assessment** May include: Mental Math, Text Exercises, Observation, and Participation **Summative Assessment**: Tests, Assessment Activities	10 days
Analyzing Quadratic Functions	4.1 Properties of a Quadratic Function *4.4* Analyzing Quadratic Functions of the Form $y = a(x - p)^2 + q$ 4.5 Equivalent Forms of the Equation of a Quadratic Function *4.6* Analyzing Quadratic Functions of the Form $y = ax^2 + bx + c$ 4.7 Modelling and Solving problems with Quadratic Functions	**Formative Assessment** May include: Mental Math, Text Exercises, Observation, and Participation **Summative Assessment**: Tests, Assessment Activities	10 days
Graphing Inequalities & Systems of Equations	5.1 Solving Quadratic Inequalities in One Variable 5.2 Graphing Linear Inequalities in Two Variables 5.3 Graphing Quadratic Inequalities in Two Variables 5.5 Solving Systems of Equations Algebraically	**Formative Assessment** May include: Mental Math, Text Exercises, Observation, and Participation **Summative Assessment**: Tests, Assessment Activities	10 days

Trigonometry	6.1 Angles in Standard Position in Quadrant 1 6.2 Angles in Standard Position in All Quadrants 6.4 The Sine Law 6.5 The Cosine Law	**Formative Assessment** May include: Mental Math, Text Exercises, Observation, and Participation **Summative Assessment**: Tests, Assessment Activities	12 days
Rational Expressions & Equations	7.1 Equivalent Rational Expressions 7.2 Multiplying and Dividing Rational Expressions 7.3 Adding and Subtracting Rational Expressions with Monomial Denominators 7.4 Adding and Subtracting Rational Expressions with Binomial and Trinomial Denominators 7.5 Solving Rational Equations 7.6 Applications of Rational Equations	**Formative Assessment** May include: Mental Math, Text Exercises, Observation, and Participation **Summative Assessment**: Tests, Assessment Activities	12 days
Absolute Value & Reciprocal Functions	8.1 Absolute Value Functions 8.2 Solving Absolute Value Equations 8.3 Graphing Reciprocals of Linear Functions 8.5 Graphing Reciprocals of Quadratic Functions	**Formative Assessment** May include: Mental Math, Text Exercises, Observation, and Participation **Summative Assessment**: Tests, Assessment Activities	8 days

Assessment Guidelines

There are various purposes for assessment:

- Assessment *for* learning **(formative assessment)**: where assessment helps teachers gain insight into what students understand in order to plan and guide instruction, and provide helpful feedback to students.
- Assessment *of* learning **(summative assessment)**: where assessment informs students, teachers and parents, as well as the broader educational community, of achievement at a certain point in time in order to celebrate success, plan interventions and support continued progress.

Academic Achievement

Grades will be calculated on summative assessment information only.
The final calculation will be a fair reflection of a student's achievement of the learning outcomes.

Term Work 80%

    (Assessment Activities (Quizzes)........... 10%

    Tests .... 70%)

Final Assessment 20%

    (School-based Exam .... 20%)

Learning Behaviours

Assessment and reporting of learning behaviors will be according to the Brandon School Division Learning Behaviors Rubric.

Unit/Term Summative Assessment – Due Dates

All assessments will be assigned a reasonable completion date. If absent, students are responsible for getting notes, completing assignments, or making arrangements for tests to be written during their own time. In the event of a school or parent excused absence, students will be given a reasonable amount of time to catch up on any assessments.

Classroom policies and rules:

-    Be respectful and responsible at all times.
-    Students are expected to attend class each day. They will come prepared to work each class period, and will be required to take notes, perform daily assignments, quizzes, and tests.
-    **Rules around Cell Phones**
1) On August 15, 2024, the Government of Manitoba has banned the use of cellular phones in the classroom for grades 9 -12, phones are permitted to be used on breaks and lunch. Phones may be used within a classroom with the permission of the classroom teacher for educational purposes only, supporting students with medical or diverse learning needs.
2) Phones are not permitted for use in Mr. Patel's class as sufficient devices are available to support student learning
-    It is the student's responsibility to notify the teacher of future absences and to schedule time to make up tests/assignments.
-    Students are not allowed to use calculator on their phones during a test or final **exam.**

Extra Help/Contact Information

I am available for extra help before school, at lunch and after school.I can be found in **Room#227**