**Pre-Calculus 12 Spring 2021**

**Teacher: Mr. Formaran**

**Resource: McGraw-Hill Ryerson Mathematics 12 Textbook & Theory and Problems for Grade 12 Math**

Course Content Overview: Grade 11 Review

***Dates are subject to change***

*Chapter 1 Sequence and Series*

1.1 Arithmetic Sequences

1.2 Arithmetic Series

1.3 Geometric Sequences

1.4 Geometric Series

1.5 Infinite Geometric Series

**Summative Assessment:**

*Chapter 2 Transformations*

2.1 Functions and Relations

2.2 Arithmetic Combinations of Functions

2.3 Composite Functions

2.4 Transformations of Graphs

2.5 Inverse Functions

2.6 Combined Transformations

**Summative Assessment:**

*Chapter 3 Polynomials*

3.1 Polynomials

3.2 Graphing Polynomial Functions

3.3 Division of Polynomials

3.4 The Remainder and Factor Theorem

3.5 Polynomial Applications

**Summative Assessment:**

*Chapter 4 Radicals and Rational Functions*

4.1 Radicals

4.2 Graphing and Solving Radical Equations

4.3 Rational Functions

4.4 Graphing Rational Functions

**Summative Assessment:**

*Chapter 6 Trigonometry Part I*

6.1 Angles and Their Measure

6.2 Trigonometric Functions of Acute Angles

6.3 Trigonometric Functions – General and Special Angles

6.4 Graphing Basic Trigonometric Functions

6.5 Applications of Periodic Functions

**Summative Assessment:**

*Chapter 7 Trigonometry Part II*

7.1 Trigonometric Identities and Equations

7.2 Verifying Trigonometric Identities

7.3 Trigonometric Equations

7.4 Sum and Difference Identities

7.5 Double Angle Identities

**Summative Assessment:**

*Chapter 5 Logarithms*

5.1 Exponents

5.2 Logarithmic Functions and Their Graphs

5.3 Properties of Logarithms

5.4 Exponential and Logarithmic Equations

5.5 Applications of Exponential and Logarithmic Equations

**Summative Assessment:**

Final Exam

**CALCULATION OF CLAS WORK MARK**

Assignments 15%

Classroom Participation 10%

Quizzes 20%

Project 15%

Tests 40%

Total 100%

**FINAL MARK – School-based final exam**

Class work 80%

Final Exam 20%

**Total 100%**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Please fill in:

I am good at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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At school, I am good at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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In Math, I am good at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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I usually have difficulty with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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I would appreciate help with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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I am \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ at note-taking

I am \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ at reading assigned passages from the textbook,

And extracting important information

I am \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ at copying notes from the board

Please circle the letter in the beginning of the expression(s) that most appropriately describes your attitude towards this course

a. I find math interesting but difficult

b. I am curious to see if I like this course

c. I am taking this because I did not want to take any other Math course

and I needed another credit

d. I am taking this course because I was told to do so

e. I love math, it is my favorite subject

**Mathematical Reflection**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Skills** | **1** | **2** | **3** | **4** |
| Addition (single digit by another single digit number) without calculator |  |  |  |  |
| Addition (double digits by single digit number) without calculator |  |  |  |  |
| Addition (double digits by another double digits number) without calculator |  |  |  |  |
| Addition (triple digits by single digit number) without calculator |  |  |  |  |
| Addition (triple digits by double digits number) without calculator |  |  |  |  |
| Addition (triple digits by another triple digits number) without calculator |  |  |  |  |
| Subtraction (single digit by another single digit number) without calculator |  |  |  |  |
| Subtraction (double digits by single digit number) without calculator |  |  |  |  |
| Subtraction (double digits by another double digits number) without calculator |  |  |  |  |
| Subtraction (triple digits by single digit number) without calculator |  |  |  |  |
| Subtraction (triple digits by double digits number) without calculator |  |  |  |  |
| Subtraction (triple digits by another triple digits number) without calculator |  |  |  |  |
| Multiplication (single digit by another single digit number) without calculator |  |  |  |  |
| Multiplication (double digits by single digit number) without calculator |  |  |  |  |
| Multiplication (double digits by another double digits number) without calculator |  |  |  |  |
| Division (single digit by another single digit number) without calculator |  |  |  |  |
| Division (double digits by single digit number) without calculator |  |  |  |  |
| Division (double digits by another double digits number) without calculator |  |  |  |  |
| Addition/subtraction of integers without calculator |  |  |  |  |
| Multiplication/division integers without calculator |  |  |  |  |
| Finding the GCF and LCM of numbers without calculator |  |  |  |  |
| Adding/subtracting similar/dissimilar fractions without calculator |  |  |  |  |
| Multiplying/dividing similar/dissimilar fractions without calculator |  |  |  |  |
| Reducing fraction to lowest form without calculator |  |  |  |  |
| Adding/subtracting decimals without calculator |  |  |  |  |
| Multiplying/dividing decimals without calculator |  |  |  |  |
| Understanding ratio and proportion |  |  |  |  |
| Understanding about squares and square roots |  |  |  |  |
| Understanding about cubes and cube roots |  |  |  |  |
| Understanding about exponents and law of exponents |  |  |  |  |
| Understanding about SOH CAH TOA |  |  |  |  |
| Understanding about Pythagorean Theorem |  |  |  |  |
| Understanding about percentage, interest and commission |  |  |  |  |
| Solving Areas and Volumes |  |  |  |  |
| Graphing linear equation |  |  |  |  |
| Interpreting linear equation |  |  |  |  |
| Graphing quadratic equation |  |  |  |  |
| Interpreting quadratic equation |  |  |  |  |

Please rate yourself in each skill/statement

**SUDOKU 1**

Calendar

Description automatically generated