

**COURSE NAME: MPM2D – Principles of Mathematics**

**Final Assessment – Student Presentations - Accumulative)  
OF Learning: Topics: (1.1 to 8.5)**

**Teacher: Antonio Pietrangelo**

**Time: (3 + 1) Hours – with ESL accommodation**

**Pages: 11**

**Student's Name:  
Student#:**

**Team Name:  
Team Members:**

**Due Date: Wednesday, February 28<sup>th</sup>, 2021 1:30 pm  
EST (Toronto Time)**

**Mark: /100**

Categories	Knowledge/ Understanding	Thinking/Inquiry/ Problem Solving	Communication	Application
Symbol	K/U	T/I	C	A
Weight	25 %	25 %	25 %	25 %
Level				

**Instructor comments/feedback:****Refer to student PowerPoint presentation**



## **Overall Expectations:**

Expectations as listed in the Ontario Curriculum course outline for your specific course.

## **Specific Expectations:**

### **Unit 1 - Systems of Linear Equations**

- 1.1 Representing Linear Relations
- 1.2 Solving Linear Equations
- 1.3 Graphically Solving Linear Systems
- 1.4 Solving Linear Systems: Substitution
- 1.5 Equivalent Linear Systems
- 1.6 Solving Linear Systems: Elimination
- 1.7 Exploring Linear Systems

### **Chapter 2: Analytic Geometry: Line Segments and Circles, and Advanced Shapes**

- 2.1 Midpoint of a Line Segment
- 2.2 Length of a Line Segment
- 2.3 Equation of a Circle
- 2.4 Classifying Figures on a Coordinate Grid
- 2.5 Verifying Properties of Geometric Figures
- 2.6 Exploring Properties of Geometric Figures
- 2.7 Using Coordinates to Solve Problems

### **Chapter 3: Graphs of Quadratic**

- 3.1 Exploring Quadratic Relations
- 3.2 Properties of Graphs of Quadratic Relations
- 3.3 Factored Form of a Quadratic Relation
- 3.4 Expanding Quadratic Expressions
- 3.5 Quadratic Models Using Factored Form
- 3.6 Exploring Quadratic and Exponential Graphs

### **Chapter 4: Factoring Algebraic**

- 4.1 Common Factors in Polynomials
- 4.2 Exploring the Factorization of Trinomials
- 4.3 Factoring Quadratics:  $x^2 + bx + c$
- 4.4 Factoring Quadratics:  $x^2 + bx + c$
- 4.5 Factoring Quadratics: Special Cases
- 4.6 Reasoning about Factoring Polynomials

### **Chapter 5: Applying Quadratic**

- 5.1 Stretching/Reflecting Quadratic Relations
- 5.2 Exploring Translations of Quadratic Relations
- 5.3 Graphing Quadratics in Vertex Form
- 5.4 Quadratic Models Using Vertex Form
- 5.5 Solving Problems Using Quadratic Relations
- 5.6 Connecting Standard and Vertex Forms



### **Chapter 6: Quadratic Equations**

- 6.1 Solving Quadratic Equations**
- 6.2 Exploring the Creation of Perfect Squares**
- 6.3 Completing the Square**
- 6.4 The Quadratic Formula**
- 6.5 Interpreting Quadratic Equation Roots**
- 6.6 Solving Problems Using Quadratic Models**

### **Chapter 7: Similar Triangles and Trigonometry**

- 7.1 Congruence and Similarity in Triangles**
- 7.2 Solving Similar Triangle Problems**
- 7.3 Exploring Similar Right Triangles**
- 7.4 The Primary Trigonometric Ratios**
- 7.5 Solving Right Triangles**
- 7.6 Solving Right Triangle Problems**

### **Chapter 8: Acute Triangle Trigonometry**

- 8.1 Exploring the Sine Law**
- 8.2 Applying the Sine Law**
- 8.3 Exploring the Cosine Law**
- 8.4 Applying the Cosine Law**
- 8.5 Solving Acute Triangle Problems**



Rubrics:

Category	Level R (0 – 49%)	Level 1 (50-59%)	Level 2 (60-69%)	Level 3 (70-79%)	Level 4 (80-100%)	Level/ Mark
Knowledge – Understanding of  <b>(Specific Expectations: 1.1 to 8.5)</b>	<b>demonstrates insufficient understanding</b>	demonstrates limited understanding	demonstrates some understanding	demonstrates considerable understanding	demonstrates thorough understanding	
				<b>Individual: Mark:</b>		
				<b>Team Mark:</b>		



Category	Level R (0 – 49%)	Level 1 (50-59%)	Level 2 (60-69%)	Level 3 (70-79%)	Level 4 (80-100%)	Level/ Mark	
Thinking and Inquiry (What if scenarios) of:  <b>(Specific Expectations: 1.1 to 8.5)</b>	demonstrates insufficient ability to apply different scenarios	demonstrates limited ability to apply different scenarios	demonstrates some ability to apply different scenarios	demonstrates considerable ability to apply different scenarios	demonstrates through ability to apply different scenarios		
				<div style="border: 1px solid black; padding: 2px;">Individual: Mark:</div> <div style="border: 1px solid black; padding: 2px;">Team Mark:</div>			



Category	Level R (0 – 49%)	Level 1 (50-59%)	Level 2 (60-69%)	Level 3 (70-79%)	Level 4 (80-100%)	Level/ Mark				
Communication  <b>Communicates effectively</b>  <b>(Specific Expectations: 1.1 to 8.5)</b>	demonstrates <b>insufficient</b> ability to communicate effectively	demonstrates <b>limited</b> ability to communicate effectively	demonstrates <b>some</b> ability to communicate effectively	demonstrates <b>considerable</b> ability to communicate effectively	demonstrates <b>through</b> ability to communicate effectively					
					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;"><b>Individual: Mark:</b></td><td style="padding: 2px;"></td></tr> <tr> <td style="padding: 2px;"><b>Team Mark:</b></td><td style="padding: 2px;"></td></tr> </table>		<b>Individual: Mark:</b>		<b>Team Mark:</b>	
<b>Individual: Mark:</b>										
<b>Team Mark:</b>										



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<p><b><u>Application:</u></b></p> <p>Demonstrates the ability to apply mathematical principles to real world situations.</p> <p><b>(Specific Expectations)</b> <b>(A1.1 to A2.3)</b></p>	<p>demonstrates <b>insufficient ability</b></p>	<p>demonstrates <b>limited ability</b></p>	<p>demonstrates <b>some ability</b></p>	<p>demonstrates <b>considerable ability</b></p>	<p>demonstrates <b>thorough ability</b></p>	
					<p>Individual: Mark:</p> <p>Team Mark:</p>	



## **PART A: KNOWLEDGE AND UNDERSTANDING (K/U) – 25%**

**Marks Based on Topics in  
student presentation**

**Instructor comments/feedback:**  
**Refer to student PowerPoint presentation**



## **PART B: THINKING AND INQUIRY (T/I) - 25%**

**Marks Based on Topics in  
student presentation**

**Instructor comments/feedback:**  
**Refer to student PowerPoint presentation**



## **PART C: COMMUNICATION (C) – 25%**

**Marks based on Student Presentation.**

**Instructor comments/feedback:**  
**Refer to student PowerPoint presentation**



#### **PART D: APPLICATION (A) – 25%**

**Marks based on Student Presentation.**

**Instructor comments/feedback:**  
**Refer to student PowerPoint presentation**