IMMACULATE CONCEPTION HIGH SCHOOL DEPARTMENT OF MATHEMATICS
CHRISTMAS TERM PLAN: September 4, 2023- December 19, 2023

NAMES OF TEACHERS: Ms Pryce, Ms Parker, Ms Bogle, Ms Dudley, Mrs Lynch, Mr McCalla

GRADE: 9 **TERM : I**			**TERM WEIGHTING:** **Test – 60%** **Coursework - 40%**	**Assessments: 2 Six Weekly Tests** **6** **Course work: Graded Homework, Online Quiz/Test, Class Quiz**

WEEK	**PERIOD**	**TOPICS**	**OBJECTIVE :** Students should be able to:	**ASSESSMENT**
	Sept 4-8	**Orientation Week**	Introduction Review of grade 8 exam	

			Students should be able to:	
1-2	Sep 11 – 22	**Consumer Arithmetic II**	1. Solve problems involving · Rates · Utility Bills: Light, Water, telephone · Invoices and shopping bills	**Course Work**
3	Sept 25 – 29	**Ratio and Proportion**	Students should be able to: 1. Review ratio (simplifying, sharing, calculating missing quantity) 2. Use map ratio to calculate the actual distance between two places given their distance apart on a map 3. Solve problems involving direct or indirect proportion	**Course Work**
4-5	**Oct 2-13**	**Relations/ Mappings and Graphs**	Students should be able to: 1. Recognize a relation 2. Describe a relation as a set of ordered pairs 3. Use an arrow diagram to show a relation. 4. Use Cartesian graphs to show a relation. 5. Identify relations which are mapping/ functions. 6. Define a mapping(function) as **many to one** or **one to one** relation 7. Construct table for given relations example x→x2+4	

6	Oct 13-17	**MID TERM**		
7	Oct 23-27	**SIX WEEKLY TEST**		
8-9	Oct 30-Nov 3, Nov 6-10	**Construction Angles and Triangles**	Students should be able to: 1. Construct with compasses only 60°, 30°, 45°, 90°, 120° etc 2. Construct the perpendicular bisector of a given line 3. Construct triangles with compasses and without the aid of a protractor when: · The measurements of three sides are given · The measurements of one side and two angles are given · The measurements of two sides and an angle are given	

10-11	Nov 13 – 24	**Transformation**	Students should be able to:
			 1. a) Define a translation
			    b) Translate a point/ figure using coordinates
			      c) State the relationship between figure and image
			      d) Identify coordinates of image
			      e) Identify translation vector given a figure and its image
				Course Work

		Transformation	ii)
			    a) Define reflection
			    b) Reflect shape in given lines e.g. x-axis, x = 2 etc
			    c) State the relationship between figure and image
			    d) Identify lines of reflection figure and its image
			iii)
			    a) Define a glide reflection
			    b) Carry out and locate the image of a point/ figure under a **glide reflection**
			    c) State the relationship between figure and image
			    d) Find the glide axis given the figure and its image
			  2. Identify each transformation given figure and image
				Course Work

12	**Nov 27 – Dec 1**	**Probability**	Students should be able to:
			  1. Give reasons for probability theory
			  2. Use diagrams to represent the outcome of ideal experiments.
			  3. Determine the experimental and theoretical probability simple events.
			  4. State the formula for the probability of a successful event.
			  5. Identify absolutely impossible and absolutely certain events and their probability.
			  6. Give probability of events with or without replacement.	

13	Dec 4-8	**SIX WEEKLY TEST**		
14	Dec 11 - 15	**Probability**	Students should be able to: 7. Determine the probability of independent, mutually exclusive and dependent outcomes.	