



Republic of the Philippines  
**Department of Education**  
Region VI – Western Visayas  
**SCHOOLS DIVISION OF CAPIZ**

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Division Advisory No. 121, s. 2023  
August 29, 2023

In compliance with DepEd Order No. 8, s. 2013  
this advisory is issued not for endorsement per DO 28, s. 2001,  
but for the information of SDO Capiz  
officials and personnel/staff

**THAILAND INTERNATIONAL MATHEMATICAL OLYMPIAD (TIMO)  
HEAT ROUND**

Attached is a letter from the Math Olympiads Training League Inc. (MOTLI) in connection with the conduct of Thailand International Mathematical Olympiad (TIMO) Heat Round Philippines on October 22, 2023.

For more details, please see the attached invitation letter along with its syllabus.



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## MATH OLYMPIADS TRAINING LEAGUE INC.

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July 8, 2023

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Sir/Madam,

Greetings of Peace!

The **Math Olympiads Training League Incorporated (MOTLI)** would like to invite your prestigious school to participate in our upcoming competition - Thailand International Mathematical Olympiad (TIMO) Heat Round 2023 - Philippine Region on the schedules indicated below.

COMPETITION	TARGET PARTICIPANTS	HEAT ROUND / FINAL ROUND STAGE	HEAT ROUND VENUE	FINAL ROUND VENUE
Thailand International Mathematical Olympiad (TIMO)	KINDERGARTEN TO GRADE 12	October 22, 2023 / March 30, 2024	ONLINE	BANGKOK, THAILAND / ONLINE

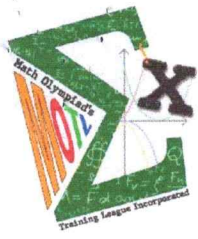
TIMO aims to:

- stimulate and foster young learners' interest in learning mathematics;
- strengthen the ability of their creative thinking;
- widen their International perspective, and promote the development of kindergarten, primary and secondary education and exchange of educational cultures throughout countries.

To prepare the student-participants, MOTLI offers Virtual Topic-Appropriate Mathematics Program and Simulation (VTAMPS V.13.0) - a 5-day online/virtual student-centered training and enhancement program open to all registered participants. Attendance to the said program is voluntary in nature and shall not be a requirement to join TIMO-Heat.

As partners of learning, MOTLI gives due recognition to schools and coaches based from the performances of their students.

We request your good office to help us in the dissemination of this information so that the Philippines can be represented by the best and finest Filipino math wizards in this international correspondence contest.



MATH OLYMPIADS TRAINING LEAGUE INC.

Medalists in the heat round will then be eligible to join the final round. For full details, see the next pages.

For information and inquiries, please contact:

MOTLI Secretariat  
**0966-873-9643**  
 Email: [motlphilippines@gmail.com](mailto:motlphilippines@gmail.com)  
[motlphilippines@gmail.com](mailto:motlphilippines@gmail.com)  
[motlphilippines.csr@gmail.com](mailto:motlphilippines.csr@gmail.com)  
[matholympiadst@gmail.com](mailto:matholympiadst@gmail.com)


Facebook Page: Math Olympiads Training League Inc. - MOTLI

Website: [www.motli.ph](http://www.motli.ph)

Thank you very much and more power!

Respectfully yours,

**ENGR. KAREN SY**  
 President  
 MOTLI

 VTAMPS VERSION 13.0 SCHEDULE (GMT+8)	September 10, 2023	September 17, 2023	October 1, 2023	October 8, 2023	October 15, 2023
	SESSION 1	SESSION 2	SESSION 3	SESSION 4	SESSION 5
KINDERGARTEN	10:00 - 12:00 NN	10:00 - 12:00 NN	10:00 - 12:00 NN	10:00 - 12:00 NN	10:00 - 12:00 NN
PRIMARY 1	10:00 - 12:00 NN	10:00 - 12:00 NN	10:00 - 12:00 NN	10:00 - 12:00 NN	10:00 - 12:00 NN
PRIMARY 2	10:00 - 12:00 NN	10:00 - 12:00 NN	10:00 - 12:00 NN	10:00 - 12:00 NN	10:00 - 12:00 NN
PRIMARY 3	8:00 - 10:00 AM	8:00 - 10:00 AM	8:00 - 10:00 AM	8:00 - 10:00 AM	8:00 - 10:00 AM
PRIMARY 4	8:00 - 10:00 AM	8:00 - 10:00 AM	8:00 - 10:00 AM	8:00 - 10:00 AM	8:00 - 10:00 AM
PRIMARY 5	1:00 - 3:00 PM	1:00 - 3:00 PM	1:00 - 3:00 PM	1:00 - 3:00 PM	1:00 - 3:00 PM
PRIMARY 6	1:00 - 3:00 PM	1:00 - 3:00 PM	1:00 - 3:00 PM	1:00 - 3:00 PM	1:00 - 3:00 PM
SECONDARY 1	3:00 - 5:00 PM	3:00 - 5:00 PM	3:00 - 5:00 PM	3:00 - 5:00 PM	3:00 - 5:00 PM
SECONDARY 2	3:00 - 5:00 PM	3:00 - 5:00 PM	3:00 - 5:00 PM	3:00 - 5:00 PM	3:00 - 5:00 PM
SECONDARY 3	5:00 - 7:00 PM	5:00 - 7:00 PM	5:00 - 7:00 PM	5:00 - 7:00 PM	5:00 - 7:00 PM
SENIOR SECONDARY	5:00 - 7:00 PM	5:00 - 7:00 PM	5:00 - 7:00 PM	5:00 - 7:00 PM	5:00 - 7:00 PM



# MATH OLYMPIADS TRAINING LEAGUE INC. (MOTLI)

SEC Registration Number: CN 201964950



## REGISTRATION PROCEDURE

a. Deposit the TIMO Registration fee of **\$20 (USD)** or **₱1160.00** (Peso) per student per competition or if you opt to take the VTAMPS V.13.0 (Math Training Program) just add **₱1400.00** at any BDO bank branches. Online banking is also accepted.

BANK NAME	ACCOUNT NAME	ACCOUNT NUMBER
BANCO DE ORO (BDO) USD	MATH OLYMPIADS TRAINING LEAGUE INC.	101-8003-99527
BANCO DE ORO (BDO) PESO	MATH OLYMPIADS TRAINING LEAGUE INC.	001-8080-26893

b. Register through online links:

COMPETITION	ONLINE REGISTRATION LINK	REGISTRATION DATES	SITTING DATE
Thailand International Mathematical Olympiad (TIMO)	<a href="https://form.jotform.com/motlijotlinks/timo-2023-heat-round-registration">https://form.jotform.com/motlijotlinks/timo-2023-heat-round-registration</a>	Starts: July 15, 2023 Ends: October 2, 2023	October 22, 2023
Virtual Topic Appropriate Mathematical Program and Simulation (VTAMPS V.13.0)	<a href="https://form.jotform.com/motlijotlinks/vtamps-v130">https://form.jotform.com/motlijotlinks/vtamps-v130</a>	Starts: July 15, 2023 Ends: September 6, 2023	Schedule in the link & above

PHILIPPINE REGION SECRETARIAT: **MATH OLYMPIADS TRAINING LEAGUE INC. - MOTLI**

[motlphilippines@gmail.com](mailto:motlphilippines@gmail.com)

[motlphilippines@gmail.com](mailto:motlphilippines@gmail.com)

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[+639668739643](tel:+639668739643)

Follow our Facebook page for updates.



# MATH OLYMPIADS TRAINING LEAGUE INC. (MOTLI)

## PRIZES AND AWARDS

### A. Students:

Students shall be recognized in the following categories

AWARDS RECEIVED PER STUDENT	
<b>GOLD</b>	MEDAL AND CERTIFICATE
<b>SILVER</b>	MEDAL AND CERTIFICATE
<b>BRONZE</b>	MEDAL AND CERTIFICATE
<b>MERIT</b>	CERTIFICATE
<b>PARTICIPATION</b>	CERTIFICATE

Additional recognition for top-performing students shall be given trophies based on the global rankings per grade level.

- Champion Trophy : the top scorer
- First and Second Runners Up Trophy: the 2nd top scorer and 3rd top scorer respectively.
- Perfect Scorer Trophy: perfect score

### B. School/Coach:

- Most Outstanding School Award  
Must produce (8) students with Gold awards
- Top Performing School Award  
Able to encourage at least 30 students with ranging awards received from Gold to Participation Awards.
- Most Outstanding Teacher-Coach Award  
A teacher-coach employed in a school institution that trains students in at most 3 different year levels and accumulates at least 25 points based on the total points obtained from the awards received per student being coached or trained.

POINT SYSTEM FOR ALL SPECIAL AWARDS	
AWARDS RECEIVED PER STUDENT	POINTS
<b>GOLD</b>	5
<b>SILVER</b>	4
<b>BRONZE</b>	3
<b>MERIT</b>	2
<b>PARTICIPATION</b>	1



PRIZES AND AWARDS

**C. Division:**

- TOP 5 Outstanding Divisions

The Top 5 outstanding divisions must accumulate the greatest number of points obtained from the awards received per student of the same division with at least 60 registered participants.

## Thailand International Mathematical Olympiad Syllabus

### Kindergarten Group

Topics	Kindergarten Group
Logical Thinking	<ul style="list-style-type: none"> <li>➤ Balance Problem</li> <li>➤ Basic Number Pattern</li> <li>➤ Basic Number Sequence</li> <li>➤ Basic Figure Pattern</li> <li>➤ IQ Age Problem</li> <li>➤ IQ Date Problem</li> </ul>
Arithmetic	<ul style="list-style-type: none"> <li>➤ Smart Addition on 1-digit numbers</li> <li>➤ Addition on 1-digit numbers with carrying</li> <li>➤ Addition on 2-digit numbers without carrying</li> <li>➤ Smart Subtraction on 1-digit numbers</li> <li>➤ Subtraction on 1-digit numbers with carrying</li> <li>➤ Subtraction on 2-digit numbers without carrying</li> <li>➤ Balance on an equation</li> </ul>
Number Theory	<ul style="list-style-type: none"> <li>➤ Introduction on Odd &amp; Even numbers</li> <li>➤ Mathematical Leveling</li> <li>➤ Basic Fibonacci Series</li> <li>➤ Match Equation</li> <li>➤ Basic Number Pattern</li> <li>➤ Simple Number Distribution</li> </ul>
Geometry	<ul style="list-style-type: none"> <li>➤ Counting on 2-D Figures &amp; 3-D Figures</li> <li>➤ Counting on number of sides &amp; interior angles</li> <li>➤ Distinction on 2-D Figures</li> <li>➤ Basic Figure Pattern</li> </ul>
Combinatorics	<ul style="list-style-type: none"> <li>➤ Arranging the numbers in orders</li> <li>➤ Simple Distribution</li> <li>➤ Counting on specific numbers</li> <li>➤ Formation of a 3-digit number</li> <li>➤ Comparison on magnitude of 2-digit numbers</li> </ul>

## Thailand International Mathematical Olympiad Syllabus

### Primary Group

Topics	Primary 1	Primary 2	Primary 3
Logical Thinking	<ul style="list-style-type: none"> <li>➤ Balance Problem</li> <li>➤ Basic Number Pattern &amp; Sequence</li> <li>➤ Basic Figure Pattern</li> <li>➤ IQ Age Problem &amp; Date Problem</li> <li>➤ Guess on 2-digit numbers</li> </ul>	<ul style="list-style-type: none"> <li>➤ Balance Problem</li> <li>➤ Basic Number Pattern &amp; Sequence</li> <li>➤ Basic Figure Pattern</li> <li>➤ IQ Age Problem &amp; Date Problem</li> <li>➤ Guess on 2-digit numbers</li> </ul>	<ul style="list-style-type: none"> <li>➤ Periodic Problem</li> <li>➤ Advanced Figure Pattern</li> <li>➤ IQ Age Problem &amp; Date Problem</li> <li>➤ Guess on 3-digit numbers</li> <li>➤ Basic Pigeonhole Principle</li> </ul>
Arithmetic	<ul style="list-style-type: none"> <li>➤ Smart Addition on 1-digit numbers with carrying</li> <li>➤ Smart Subtraction on 1 to 2-digit numbers with carrying</li> <li>➤ Multiplication on 1 to 2-digit numbers without carrying</li> <li>➤ Balance on an equation</li> </ul>	<ul style="list-style-type: none"> <li>➤ Smart Addition on 2-digit numbers with carrying</li> <li>➤ Smart Subtraction on 1 to 2-digit numbers with carrying</li> <li>➤ Multiplication on 2-digit numbers with carrying</li> <li>➤ Balance on an equation</li> </ul>	<ul style="list-style-type: none"> <li>➤ Gaussian Addition</li> <li>➤ Smart Addition on 3-digit numbers with carrying</li> <li>➤ Smart Subtraction on 3-digit numbers with carrying</li> <li>➤ Multiplication on 3-digit numbers</li> </ul>
Number Theory	<ul style="list-style-type: none"> <li>➤ Introduction on Odd &amp; Even</li> <li>➤ Mathematical Leveling</li> <li>➤ Advanced Fibonacci Series</li> <li>➤ Match Equation</li> <li>➤ Basic Arithmetic Pattern</li> </ul>	<ul style="list-style-type: none"> <li>➤ Introduction on Odd &amp; Even</li> <li>➤ Mathematical Leveling</li> <li>➤ Advanced Fibonacci Series</li> <li>➤ Match Equation</li> <li>➤ Basic Arithmetic Pattern</li> </ul>	<ul style="list-style-type: none"> <li>➤ Introduction on prime numbers</li> <li>➤ Sum, Difference &amp; Multiples</li> <li>➤ Arithmetic Operation</li> <li>➤ Basic Arithmetic Pattern</li> <li>➤ Simple Divisibility</li> </ul>
Geometry	<ul style="list-style-type: none"> <li>➤ Counting on number of 2-D &amp; 3-D Figures</li> <li>➤ Counting on number of sides &amp; interior angles</li> <li>➤ Distinction on 2-D Figures</li> <li>➤ Basic Figure Pattern</li> </ul>	<ul style="list-style-type: none"> <li>➤ Counting on number of 2-D &amp; 3-D Figures</li> <li>➤ Counting on number of sides &amp; interior angles</li> <li>➤ Distinction on 2-D Figures</li> <li>➤ Basic Figure Pattern</li> </ul>	<ul style="list-style-type: none"> <li>➤ Counting on number of 2-D Figures</li> <li>➤ Counting on Vertices, Faces &amp; Edges of 3-D Figures</li> <li>➤ Observations about 3-D Figures</li> <li>➤ Basic Concept about Area &amp; Perimeter</li> <li>➤ Relationship between Line Segments, Angles &amp; Figures</li> </ul>
Combinatorics	<ul style="list-style-type: none"> <li>➤ Seven Bridges of Königsberg</li> <li>➤ Arranging numbers in orders</li> <li>➤ Simple Distribution</li> <li>➤ Counting on specific numbers</li> <li>➤ Formation of a 3-digit number</li> </ul>	<ul style="list-style-type: none"> <li>➤ Arranging numbers in orders</li> <li>➤ Simple Distribution</li> <li>➤ Counting on specific numbers</li> <li>➤ Formation of a 3-digit number</li> <li>➤ Simple Combination</li> </ul>	<ul style="list-style-type: none"> <li>➤ Basic Routing Problem</li> <li>➤ Advanced Distribution</li> <li>➤ Counting on specific numbers</li> <li>➤ Formation of a 3-digit number</li> <li>➤ Excess and Deficiency</li> </ul>



## Thailand International Mathematical Olympiad Syllabus

### Primary Group

Topics	Primary 4	Primary 5	Primary 6
Logical Thinking	<ul style="list-style-type: none"> <li>➤ Periodic Problem</li> <li>➤ Advanced Figure Pattern</li> <li>➤ Chicken Rabbit Theorem</li> <li>➤ Guess on 3-digit numbers</li> <li>➤ Basic Pigeonhole Principle</li> </ul>	<ul style="list-style-type: none"> <li>➤ Chicken Rabbit Theorem</li> <li>➤ Speed, Distance &amp; Time Problem</li> <li>➤ Guess on 4-digit numbers by given number properties</li> <li>➤ Advanced Pigeonhole Principle</li> </ul>	<ul style="list-style-type: none"> <li>➤ Construction Problem</li> <li>➤ Speed, Distance &amp; Time Problem</li> <li>➤ Guess on 4-digit numbers by given number properties</li> <li>➤ Advanced Pigeonhole Principle</li> </ul>
Arithmetic	<ul style="list-style-type: none"> <li>➤ Gaussian Addition</li> <li>➤ Smart Addition on 4-digit numbers with carrying</li> <li>➤ Smart Subtraction on 4-digit numbers with carrying</li> <li>➤ Multiplication on 3-digit numbers</li> </ul>	<ul style="list-style-type: none"> <li>➤ Advanced Gaussian Addition</li> <li>➤ Smart Calculation on Decimals &amp; Fractions</li> <li>➤ Sum of a series of square numbers</li> <li>➤ Method of Difference equations</li> <li>➤ Smart Addition on 5-digit numbers with carrying</li> </ul>	<ul style="list-style-type: none"> <li>➤ Advanced Gaussian Addition</li> <li>➤ Smart Calculation on Fractions</li> <li>➤ Sum of a series of square numbers</li> <li>➤ Sum of a series of cubic numbers</li> <li>➤ Method of Difference equations</li> <li>➤ Sum of Geometric Sequence</li> </ul>
Number Theory	<ul style="list-style-type: none"> <li>➤ Introduction on prime numbers</li> <li>➤ Sum, Difference &amp; Multiples</li> <li>➤ Arithmetic Operation</li> <li>➤ Relationship between L.C.M &amp; H.C.F</li> <li>➤ Simple Divisibility</li> </ul>	<ul style="list-style-type: none"> <li>➤ Advanced Divisibility</li> <li>➤ Number of positive factors</li> <li>➤ Sum of all positive factors</li> <li>➤ Unit digit of a series of <math>n</math>-digit numbers</li> </ul>	<ul style="list-style-type: none"> <li>➤ Advanced Divisibility</li> <li>➤ Number of positive factors</li> <li>➤ Sum of all positive factors</li> <li>➤ Unit digit of a series of <math>n</math>-digit numbers</li> </ul>
Geometry	<ul style="list-style-type: none"> <li>➤ Counting on number of 2-D Figures</li> <li>➤ Counting on Vertices, Faces &amp; Edges of 3-D Figures</li> <li>➤ Observations about 3-D Figures</li> <li>➤ Basic Concept about Area &amp; Perimeter</li> <li>➤ Relationship between Line Segments, Angles &amp; Figures</li> </ul>	<ul style="list-style-type: none"> <li>➤ Area &amp; Perimeter of 2-D Figures</li> <li>➤ Ratio of Area of 2-D Figures</li> <li>➤ Volume &amp; Surface Area of 3-D Figures</li> <li>➤ Counting on number of 2-D Figures</li> <li>➤ Relationship between Line Segments, Angles &amp; Figures</li> </ul>	<ul style="list-style-type: none"> <li>➤ Area &amp; Perimeter of 2-D Figures</li> <li>➤ Ratio of Area of 2-D Figures</li> <li>➤ Volume &amp; Surface Area of 3-D Figures</li> <li>➤ Area of circle &amp; Circumstance</li> <li>➤ Relationship between Line Segments, Angles &amp; Figures</li> </ul>
Combinatorics	<ul style="list-style-type: none"> <li>➤ Basic Routing Problem</li> <li>➤ Advanced Distribution</li> <li>➤ Counting on specific numbers</li> <li>➤ Formation of a 3-digit number</li> <li>➤ Excess and Deficiency</li> </ul>	<ul style="list-style-type: none"> <li>➤ Advanced Pigeonhole Principle</li> <li>➤ Advanced Routing Problem</li> <li>➤ Combinations &amp; Permutations</li> <li>➤ Principle of Inclusion and Exclusion</li> <li>➤ Excess and Deficiency</li> </ul>	<ul style="list-style-type: none"> <li>➤ Advanced Pigeonhole Principle</li> <li>➤ Advanced Routing Problem</li> <li>➤ Combinations &amp; Permutations</li> <li>➤ Principle of Inclusion and Exclusion</li> <li>➤ Simple Probability</li> </ul>

## Thailand International Mathematical Olympiad Syllabus

### Secondary Group

Topics	Secondary 1	Secondary 2
Logical Thinking	<ul style="list-style-type: none"> <li>➤ Advanced Periodic Problems</li> <li>➤ Speed, Distance &amp; Time Problem</li> <li>➤ Advanced Pigeonhole Principle</li> <li>➤ Guess on 4-digit numbers</li> <li>➤ Relationship between mean, median &amp; sum</li> </ul>	<ul style="list-style-type: none"> <li>➤ Advanced Pigeonhole Principle</li> <li>➤ Guess on 4-digit numbers</li> <li>➤ Relationship between mean, median &amp; sum</li> <li>➤ Advanced Distributions</li> <li>➤ Advanced Periodic Problems</li> </ul>
Algebra	<ul style="list-style-type: none"> <li>➤ Operation on directed numbers</li> <li>➤ Algebraic expression</li> <li>➤ Linear Equations</li> <li>➤ Introduction on Absolute Value</li> <li>➤ Simplification on surd form</li> <li>➤ Euclidean Algorithm</li> </ul>	<ul style="list-style-type: none"> <li>➤ Algebraic expression</li> <li>➤ Factorization</li> <li>➤ Introduction on Absolute Value</li> <li>➤ Simplification on surd form</li> <li>➤ Euclidean Algorithm</li> <li>➤ Introduction on Inequalities</li> </ul>
Number Theory	<ul style="list-style-type: none"> <li>➤ Advanced problems on Prime Numbers</li> <li>➤ Counting on possible solution(s) on Indefinite equations</li> <li>➤ Introduction on repeating surd forms</li> <li>➤ Sum of all Digits</li> <li>➤ Relationship between L.C.M &amp; H.C.F</li> </ul>	<ul style="list-style-type: none"> <li>➤ Periodic remainder problems</li> <li>➤ Counting on possible solution(s) on Indefinite equations</li> <li>➤ Introduction on repeating surd forms</li> <li>➤ Extreme values of a polynomial</li> <li>➤ Factor Theorem</li> </ul>
Geometry	<ul style="list-style-type: none"> <li>➤ Usage of Pythagorean theorem</li> <li>➤ Characteristics of Congruent Triangles &amp; Similar Triangles</li> <li>➤ Area of circle &amp; Circumstance</li> <li>➤ Relationship between Line Segments, Angles &amp; Figures</li> <li>➤ Knowledge on Rectangular Coordinate System</li> <li>➤ Volume &amp; Surface Area of 3-D Figures</li> </ul>	<ul style="list-style-type: none"> <li>➤ Advanced usage of Pythagorean theorem</li> <li>➤ Characteristics of Congruent Triangles &amp; Similar Triangles</li> <li>➤ Triangle Inequality</li> <li>➤ Relationship between Line Segments, Angles &amp; Figures</li> <li>➤ Knowledge on Rectangular Coordinate System</li> <li>➤ Concepts about angle bisectors</li> </ul>
Combinatorics	<ul style="list-style-type: none"> <li>➤ Advanced Pigeonhole Principle</li> <li>➤ Advanced Routing Problem</li> <li>➤ Combinations &amp; Permutations</li> <li>➤ Principle of Inclusion and Exclusion</li> <li>➤ Simple Probability</li> <li>➤ Triangle Inequality</li> </ul>	<ul style="list-style-type: none"> <li>➤ Advanced Pigeonhole Principle</li> <li>➤ Advanced Routing Problem</li> <li>➤ Combinations &amp; Permutations</li> <li>➤ Principle of Inclusion and Exclusion</li> <li>➤ Simple Probability</li> <li>➤ Counting on Like &amp; Unlike Terms of a polynomial</li> </ul>

## Thailand International Mathematical Olympiad Syllabus

### Secondary Group

Topics	Secondary 3	Senior Secondary Group (S4 – S6 in ONE group)
Logical Thinking	<ul style="list-style-type: none"> <li>➤ Advanced Pigeonhole Principle</li> <li>➤ Guess on 4-digit numbers</li> <li>➤ Relationship between mean, median &amp; sum</li> <li>➤ Advanced Distributions</li> <li>➤ Advanced Periodic Problems</li> </ul>	<ul style="list-style-type: none"> <li>➤ Advanced Pigeonhole Principle</li> <li>➤ Guess on 5-digit numbers</li> <li>➤ Relationship between mean, median &amp; sum</li> <li>➤ Advanced Distributions</li> <li>➤ Advanced Periodic Problems</li> </ul>
Algebra	<ul style="list-style-type: none"> <li>➤ Sum &amp; Product of roots of a quadratic equation</li> <li>➤ Algebraic expression</li> <li>➤ Introduction on Absolute Value</li> <li>➤ Simplification on surd form</li> <li>➤ Euclidean Algorithm</li> <li>➤ Introduction on Inequalities</li> </ul>	<ul style="list-style-type: none"> <li>➤ Sum &amp; Product of roots of a quadratic equation</li> <li>➤ Algebraic expression</li> <li>➤ Introduction on Absolute Value</li> <li>➤ Simplification on surd form</li> <li>➤ Euclidean Algorithm</li> <li>➤ Introduction on Inequalities</li> </ul>
Number Theory	<ul style="list-style-type: none"> <li>➤ Periodic remainder problems</li> <li>➤ Counting on possible solution(s) on Indefinite equations</li> <li>➤ Introduction on repeating surd forms</li> <li>➤ Extreme values of a polynomial</li> <li>➤ Modular Arithmetic</li> </ul>	<ul style="list-style-type: none"> <li>➤ Periodic remainder problems</li> <li>➤ Counting on possible solution(s) on Indefinite equations</li> <li>➤ Introduction on repeating surd forms</li> <li>➤ Extreme values of a polynomial</li> <li>➤ Modular Arithmetic</li> <li>➤ Introduction on complex numbers</li> </ul>
Geometry	<ul style="list-style-type: none"> <li>➤ Advanced usage of Pythagorean theorem</li> <li>➤ Menelaus' Theorem</li> <li>➤ Relationship between Line Segments, Angles &amp; Figures</li> <li>➤ Advanced knowledge on Rectangular Coordinate System</li> <li>➤ Trigonometry</li> </ul>	<ul style="list-style-type: none"> <li>➤ Advanced knowledge on Rectangular Coordinate System</li> <li>➤ Menelaus' Theorem</li> <li>➤ Relationship between Line Segments, Angles &amp; Figures</li> <li>➤ Circumcentre, Incentre, Centroid &amp; Orthocentre</li> <li>➤ Trigonometry</li> </ul>
Combinatorics	<ul style="list-style-type: none"> <li>➤ Advanced Pigeonhole Principle</li> <li>➤ Combinations &amp; Permutations</li> <li>➤ Principle of Inclusion and Exclusion</li> <li>➤ Advanced Probability</li> <li>➤ Counting on Like &amp; Unlike Terms of a polynomial</li> </ul>	<ul style="list-style-type: none"> <li>➤ Advanced Pigeonhole Principle</li> <li>➤ Combinations &amp; Permutations</li> <li>➤ Principle of Inclusion and Exclusion</li> <li>➤ Advanced Probability</li> <li>➤ Counting on Like &amp; Unlike Terms of a polynomial</li> </ul>



DepEd Capiz &lt;capiz@deped.gov.ph&gt;

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**TIMO 2023 HEAT ROUND - INVITATION**

1 message

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**MOTL PH** <motlphilippines@gmail.com>  
Bcc: capiz@deped.gov.ph

Fri, Aug 18, 2023 at 7:35 AM

Dear Ma'am/Sir,

Greetings!

Math Olympiads Training League Inc. (MOTLI) would like to invite your school to join the upcoming competition, **Thailand International Mathematical Olympiad (TIMO) Heat Round Philippines** on October 22, 2023. TIMO has a world-class faculty that sets a global standard for academic excellence in the field of Mathematics. With the largest number of international students in Asia and the largest number of students studying abroad, TIMO is among the most respected and desirable competitions in the world. The objective of this competition is to develop Mathematics Olympiads all over the world. With more than 25 participating countries, TIMO is one of the most sophisticated international competitions we have handled.

In line with this, MOTLI also offers a training program called **VTAMPS V.13.0 (Virtual Topic-Appropriate Mathematical Program and Simulation)** in preparation for the TIMO Heat Round Contest. For more details, please see the attached invitation letter along with its syllabus.

**THAILAND INTERNATIONAL MATHEMATICAL OLYMPIADS 2023 HEAT ROUND****REGISTRATION LINK:**<https://form.jotform.com/motlijotlinks/timo-2023-heat-round-registration>**Registration Deadline: OCTOBER 2, 2023****CONTEST DATE: OCTOBER 22, 2023****VTAMPS V.13.0 REGISTRATION LINK:**

<https://form.jotform.com/motlijotlinks/vtamps-v130>

**Registration Deadline: SEPTEMBER 6, 2023 (Limited Slots)**

**\* Please disregard this email if you have already registered \***

God Bless and stay safe.

Math Olympiads Training League Inc (MOTLI)

[motliphilippines@gmail.com](mailto:motliphilippines@gmail.com)

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**3 attachments**

 **TIMO-2023-HEAT-LETTER-TO-SCHOOLS.pdf**  
887K

 **TIMO-Syllabus.pdf**  
259K

 **TIMO-2023-HEAT-LETTER-TO-PARENTS.pdf**  
649K