Republic of the Philippines
Department of Education
REGION XI
SCHOOLS DIVISION OF DIGOS CITY

Office of the Schools Division Superintendent

DIVISION MEMORANDUM
CID-2023-3776

To : CID Chief
Public Schools District Supervisors
Education Program Supervisor in Math
Schools Heads of Public and Private Schools

Subject : **MATH OLYMPIADS TRAINING LEAGUE INCORPORATED (MOTLI) SCHEDULES**

Date : September 18, 2023

Pursuant to RM-CLMD-2023-529 dated September 7, 2023 entitled "Math Olympiads Training League Incorporated (MOTLI)," this office encourages schools to participate in the Thailand International Mathematics Olympiad (TIMO) Heat Round 2023. The competition will be on October 22, 2023 and March 30, 2024 via online.

Further, MOTLI offers a Virtual Topic-Appropriate Mathematics Program and Simulation (VTAMPS V.13.0), a five-day virtual/online student-centered training and enhancement program.

The mechanics, syllabus and other details of the contests are in the enclosures.

For queries, please contact 0966-873-9645 or visit www.motli.ph. The following area coordinators for MOTLI in our schools division office in the elementary and secondary levels can also be contacted, to wit:

Name of Teacher	School	Level
Nesylda D. Alpacion	Digos City Central Elem. School	Elementary
Myrell P. Dumigsi	Digos City National High School	Secondary

Participation to the said activity shall be voluntary, on official time only, no government funds involved and subject to the no-disruption-of-classes policy stipulated in DepEd Order No. 9, s. 2005 entitled "Instituting Measures to Increase Engaged Time-on-Task and Ensuring Compliance Therewith."

Immediate dissemination of this Memorandum is desired.

For and in the absence of the
Schools Division Superintendent

DepEd Schools Division of Digos City
RECORDS SECTION
RECEIVED
DATE: SEP 21 2023 TIME: 1:47pm
BY:
23-107949

PETER JASON C. SENARILLOS
Senior Education Program Specialist
Officer In-Charge

Enclosed: As stated.
CID/jbc

Roxas Street cor. Lopez Jaena Street, Zone II, Digos City 8002
(082) 553-8396 | (082) 553-8376 | (082) 553-9170 | (082) 553-8375
(082) 553-8396 | (082) 553-8376
www.depeddigoscity.org | digos.city@deped.gov.ph

RECORDS

Republic of the Philippines
Department of Education
DAVAO REGION
Office of the Regional Director

REGIONAL MEMORANDUM
CLMD-2023-529

To : Schools Division Superintendents

Subject: MATH OLYMPIADS TRAINING LEAGUE INCORPORATED (MOTLI) SCHEDULES

Date : September 7, 2023

Herewith is the invitation letter from Engr. Karen Sy, President of MOTLI, on Thailand International Mathematics Olympiad (TIMO) Heat Round 2023. The competition will be on October 22, 2023 and March 30, 2024 via online.

Further, MOTLI offers Virtual Topic-Appropriate Mathematics Program and Simulation (VTAMPS V.13.0), a five-day virtual/online student-centered training and enhancement program, for inquiries please contact 0966-873-9645 or visit: www.motli.ph.

The mechanics, syllabus and other details of the contests are in the enclosures.

Participation to the said activity shall be voluntary, on official time only, no government funds involved and subject to the no-disruption-of-classes policy stipulated in DepEd Order No. 9, s. 2005 entitled "Instituting Measures to Increase Engaged Time-on-Task and Ensuring Compliance Therewith".

Immediate dissemination of this Memorandum is desired.

ALLAN G. FARNAZO
Director IV

By the Authority of the Regional Director:

Enclosure: As stated.

ROC9/HAB

9/8/2023
MARILYN D. MADRAZO, EdD.
Chief, PRD
Officer-in-Charge

Address: F. Torres St., Davao City (8000)
Telephone Nos.: (082) 291-1665; (082) 221-6147

MATH OLYMPIADS TRAINING LEAGUE INC.

TIMO

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 ofkindergarten, 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.

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
motliphilippines@gmail.com
motliphilippines.csr@gmail.com
matholympiadstl@gmail.com

Facebook Page: Math Olympiads Training League Inc. - MOTLI

Website: www.motli.ph

Thank you very much and more power!

Respectfully yours,

ENGR. KAREN SY
President
MOTLI

VTAMPS VERSION 13.0 SCHEDULE (GMT+8)

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)	https://form.jotform.com/motlijotlinks/timo-2023-heat-round-registration	Starts: July 15, 2023 Ends: October 2, 2023	October 22, 2023
Virtual Topic Appropriate Mathematical Program and Simulation (VTAMPS V.13.0)	https://form.jotform.com/motlijotlinks/vtamps-v130	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
motliphilippines@gmail.com
motliphilippines.csr@gmail.com
matholympiadstl@gmail.com
+639668739643
Follow our Facebook page for updates.

PRIZES AND AWARDS

A. Students:

Students shall be recognized in the following categories

AWARDS RECEIVED PER STUDENT	
GOLD	MEDAL AND CERTIFCATE
SILVER	MEDAL AND CERTIFCATE
BRONZE	MEDAL AND CERTIFCATE
MERIT	CERTIFICATE
PARTICIPATION	CERTIFICATE

Additional recognition for top-performing students shall be given trophies based on theglobal 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**
GOLD	5
SILVER	4
BRONZE	3
MERIT	2
PARTICIPATION	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	➢ Balance Problem ➢ Basic Number Pattern ➢ Basic Number Sequence ➢ Basic Figure Pattern ➢ IQ Age Problem ➢ IQ Date Problem
Arithmetic	➢ Smart Addition on 1-digit numbers ➢ Addition on 1-digit numbers with carrying ➢ Addition on 2-digit numbers without carrying ➢ Smart Subtraction on 1-digit numbers ➢ Subtraction on 1-digit numbers with carrying ➢ Subtraction on 2-digit numbers without carrying ➢ Balance on an equation
Number Theory	➢ Introduction on Odd & Even numbers ➢ Mathematical Leveling ➢ Basic Fibonacci Series ➢ Match Equation ➢ Basic Number Pattern ➢ Simple Number Distribution
Geometry	➢ Counting on 2-D Figures & 3-D Figures ➢ Counting on number of sides & interior angles ➢ Distinction on 2-D Figures ➢ Basic Figure Pattern
Combinatorics	➢ Arranging the numbers in orders ➢ Simple Distribution ➢ Counting on specific numbers ➢ Formation of a 3-digit number ➢ Comparison on magnitude of 2-digit numbers

Thailand International Mathematical Olympiad Syllabus

Primary Group

Topics	Primary 1	Primary 2	Primary 3
Logical Thinking	➢ Balance Problem ➢ Basic Number Pattern & Sequence ➢ Basic Figure Pattern ➢ IQ Age Problem & Date Problem ➢ Guess on 2-digit numbers	➢ Balance Problem ➢ Basic Number Pattern & Sequence ➢ Basic Figure Pattern ➢ IQ Age Problem & Date Problem ➢ Guess on 2-digit numbers	➢ Periodic Problem ➢ Advanced Figure Pattern ➢ IQ Age Problem & Date Problem ➢ Guess on 3-digit numbers ➢ Basic Pigeonhole Principle
Arithmetic	➢ Smart Addition on 1-digit numbers with carrying ➢ Smart Subtraction on 1 to 2-digit numbers with carrying ➢ Multiplication on 1 to 2-digit numbers without carrying ➢ Balance on an equation	➢ Smart Addition on 2-digit numbers with carrying ➢ Smart Subtraction on 1 to 2-digit numbers with carrying ➢ Multiplication on 2-digit numbers with carrying ➢ Balance on an equation	➢ Gaussian Addition ➢ Smart Addition on 3-digit numbers with carrying ➢ Smart Subtraction on 3-digit numbers with carrying ➢ Multiplication on 3-digit numbers
Number Theory	➢ Introduction on Odd & Even ➢ Mathematical Leveling ➢ Advanced Fibonacci Series ➢ Match Equation ➢ Basic Arithmetic Pattern	➢ Introduction on Odd & Even ➢ Mathematical Leveling ➢ Advanced Fibonacci Series ➢ Match Equation ➢ Basic Arithmetic Pattern	➢ Introduction on prime numbers ➢ Sum, Difference & Multiples ➢ Arithmetic Operation ➢ Basic Arithmetic Pattern ➢ Simple Divisibility
Geometry	➢ Counting on number of 2-D & 3-D Figures ➢ Counting on number of sides & interior angles ➢ Distinction on 2-D Figures ➢ Basic Figure Pattern	➢ Counting on number of 2-D & 3-D Figures ➢ Counting on number of sides & interior angles ➢ Distinction on 2-D Figures ➢ Basic Figure Pattern	➢ Counting on number of 2-D Figures ➢ Counting on Vertices, Faces & Edges of 3-D Figures ➢ Observations about 3-D Figures ➢ Basic Concept about Area & Perimeter ➢ Relationship between Line Segments, Angles & Figures
Combinatorics	➢ Seven Bridges of Königsberg ➢ Arranging numbers in orders ➢ Simple Distribution ➢ Counting on specific numbers ➢ Formation of a 3-digit number	➢ Arranging numbers in orders ➢ Simple Distribution ➢ Counting on specific numbers ➢ Formation of a 3-digit number ➢ Simple Combination	➢ Basic Routing Problem ➢ Advanced Distribution ➢ Counting on specific numbers ➢ Formation of a 3-digit number ➢ Excess and Deficiency

Thailand International Mathematical Olympiad Syllabus

Primary Group

Topics	Primary 4	Primary 5	Primary 6
Logical Thinking	➢ Periodic Problem ➢ Advanced Figure Pattern ➢ Chicken Rabbit Theorem ➢ Guess on 3-digit numbers ➢ Basic Pigeonhole Principle	➢ Chicken Rabbit Theorem ➢ Speed, Distance & Time Problem ➢ Guess on 4-digit numbers by given number properties ➢ Advanced Pigeonhole Principle	➢ Construction Problem ➢ Speed, Distance & Time Problem ➢ Guess on 4-digit numbers by given number properties ➢ Advanced Pigeonhole Principle
Arithmetic	➢ Gaussian Addition ➢ Smart Addition on 4-digit numbers with carrying ➢ Smart Subtraction on 4-digit numbers with carrying ➢ Multiplication on 3-digit numbers	➢ Advanced Gaussian Addition ➢ Smart Calculation on Decimals & Fractions ➢ Sum of a series of square numbers ➢ Method of Difference equations ➢ Smart Addition on 5-digit numbers with carrying	➢ Advanced Gaussian Addition ➢ Smart Calculation on Fractions ➢ Sum of a series of square numbers ➢ Sum of a series of cubic numbers ➢ Method of Difference equations ➢ Sum of Geometric Sequence
Number Theory	➢ Introduction on prime numbers ➢ Sum, Difference & Multiples ➢ Arithmetic Operation ➢ Relationship between L.C.M & H.C.F ➢ Simple Divisibility	➢ Advanced Divisibility ➢ Number of positive factors ➢ Sum of all positive factors ➢ Unit digit of a series of n-digit numbers	➢ Advanced Divisibility ➢ Number of positive factors ➢ Sum of all positive factors ➢ Unit digit of a series of n-digit numbers
Geometry	➢ Counting on number of 2-D Figures ➢ Counting on Vertices, Faces & Edges of 3-D Figures ➢ Observations about 3-D Figures ➢ Basic Concept about Area & Perimeter ➢ Relationship between Line Segments, Angles & Figures	➢ Area & Perimeter of 2-D Figures ➢ Ratio of Area of 2-D Figures ➢ Volume & Surface Area of 3-D Figures ➢ Counting on number of 2-D Figures ➢ Relationship between Line Segments, Angles & Figures	➢ Area & Perimeter of 2-D Figures ➢ Ratio of Area of 2-D Figures ➢ Volume & Surface Area of 3-D Figures ➢ Area of circle & Circumstance ➢ Relationship between Line Segments, Angles & Figures
Combinatorics	➢ Basic Routing Problem ➢ Advanced Distribution ➢ Counting on specific numbers ➢ Formation of a 3-digit number ➢ Excess and Deficiency	➢ Advanced Pigeonhole Principle ➢ Advanced Routing Problem ➢ Combinations & Permutations ➢ Principle of Inclusion and Exclusion ➢ Excess and Deficiency	➢ Advanced Pigeonhole Principle ➢ Advanced Routing Problem ➢ Combinations & Permutations ➢ Principle of Inclusion and Exclusion ➢ Simple Probability

Thailand International Mathematical Olympiad Syllabus

Secondary Group

Topics	Secondary 1	Secondary 2
Logical Thinking	➢ Advanced Periodic Problems ➢ Speed, Distance & Time Problem ➢ Advanced Pigeonhole Principle ➢ Guess on 4-digit numbers ➢ Relationship between mean, median & sum	➢ Advanced Pigeonhole Principle ➢ Guess on 4-digit numbers ➢ Relationship between mean, median & sum ➢ Advanced Distributions ➢ Advanced Periodic Problems
Algebra	➢ Operation on directed numbers ➢ Algebraic expression ➢ Linear Equations ➢ Introduction on Absolute Value ➢ Simplification on surd form ➢ Euclidean Algorithm	➢ Algebraic expression ➢ Factorization ➢ Introduction on Absolute Value ➢ Simplification on surd form ➢ Euclidean Algorithm ➢ Introduction on Inequalities
Number Theory	➢ Advanced problems on Prime Numbers ➢ Counting on possible solution(s) on Indefinite equations ➢ Introduction on repeating surd forms ➢ Sum of all Digits ➢ Relationship between L.C.M & H.C.F	➢ Periodic remainder problems ➢ Counting on possible solution(s) on Indefinite equations ➢ Introduction on repeating surd forms ➢ Extreme values of a polynomial ➢ Factor Theorem
Geometry	➢ Usage of Pythagorean theorem ➢ Characteristics of Congruent Triangles & Similar Triangles ➢ Area of circle & Circumstance ➢ Relationship between Line Segments, Angles & Figures ➢ Knowledge on Rectangular Coordinate System ➢ Volume & Surface Area of 3-D Figures	➢ Advanced usage of Pythagorean theorem ➢ Characteristics of Congruent Triangles & Similar Triangles ➢ Triangle Inequality ➢ Relationship between Line Segments, Angles & Figures ➢ Knowledge on Rectangular Coordinate System ➢ Concepts about angle bisectors
Combinatorics	➢ Advanced Pigeonhole Principle ➢ Advanced Routing Problem ➢ Combinations & Permutations ➢ Principle of Inclusion and Exclusion ➢ Simple Probability ➢ Triangle Inequality	➢ Advanced Pigeonhole Principle ➢ Advanced Routing Problem ➢ Combinations & Permutations ➢ Principle of Inclusion and Exclusion ➢ Simple Probability ➢ Counting on Like & Unlike Terms of a polynomial

Thailand International Mathematical Olympiad Syllabus

Secondary Group

Topics	Secondary 3	Senior Secondary Group (S4 – S6 in ONE group)
Logical Thinking	➢ Advanced Pigeonhole Principle ➢ Guess on 4-digit numbers ➢ Relationship between mean, median & sum ➢ Advanced Distributions ➢ Advanced Periodic Problems	➢ Advanced Pigeonhole Principle ➢ Guess on 5-digit numbers ➢ Relationship between mean, median & sum ➢ Advanced Distributions ➢ Advanced Periodic Problems
Algebra	➢ Sum & Product of roots of a quadratic equation ➢ Algebraic expression ➢ Introduction on Absolute Value ➢ Simplification on surd form ➢ Euclidean Algorithm ➢ Introduction on Inequalities	➢ Sum & Product of roots of a quadratic equation ➢ Algebraic expression ➢ Introduction on Absolute Value ➢ Simplification on surd form ➢ Euclidean Algorithm ➢ Introduction on Inequalities
Number Theory	➢ Periodic remainder problems ➢ Counting on possible solution(s) on Indefinite equations ➢ Introduction on repeating surd forms ➢ Extreme values of a polynomial ➢ Modular Arithmetic	➢ Periodic remainder problems ➢ Counting on possible solution(s) on Indefinite equations ➢ Introduction on repeating surd forms ➢ Extreme values of a polynomial ➢ Modular Arithmetic ➢ Introduction on complex numbers
Geometry	➢ Advanced usage of Pythagorean theorem ➢ Menelaus' Theorem ➢ Relationship between Line Segments, Angles & Figures ➢ Advanced knowledge on Rectangular Coordinate System ➢ Trigonometry	➢ Advanced knowledge on Rectangular Coordinate System ➢ Menelaus' Theorem ➢ Relationship between Line Segments, Angles & Figures ➢ Circumcentre, Incentre, Centroid & Orthocentre ➢ Trigonometry
Combinatorics	➢ Advanced Pigeonhole Principle ➢ Combinations & Permutations ➢ Principle of Inclusion and Exclusion ➢ Advanced Probability ➢ Counting on Like & Unlike Terms of a polynomial	➢ Advanced Pigeonhole Principle ➢ Combinations & Permutations ➢ Principle of Inclusion and Exclusion ➢ Advanced Probability ➢ Counting on Like & Unlike Terms of a polynomial