



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

**OFFICE OF THE SCHOOLS DIVISION SUPERINTENDENT**

**DIVISION MEMORANDUM**

CID-2024-742

To : Assistant Schools Division Superintendent  
 CID and SGOD Chiefs  
 Public Schools District Supervisors  
 Education Program Supervisors  
 Elementary Public and Private School Heads  
 Elementary Public and Private School Teachers

Subject : **INVITATION TO PARTICIPATE TO THE 5<sup>TH</sup> PHILIPPINE NATIONAL VEDIC MATHEMATICS OLYMPIAD**

Date : August 20, 2024

Attached is a letter from Virgilio Prudente, Founder of MATH-Inic Philippines, re: 5<sup>th</sup> Philippine National Vedic Mathematics Olympiad.

Participation to the activities is voluntary and that the policy on “No Disruption of Classes” per DepEd Order No. 9, s. 2005 entitled “Instituting Measures to Increase Engaged Time-on-Task and Ensuring Compliance Therewith” and the no-collection policy as stated in Section 3 of Republic Act No. 5546 also known as an Act Prohibiting the Sale of Tickets and/or the Collection of Contributions for Whatever Project or Purpose from Students and Teachers of Public and Private Schools, Colleges and Universities (Ganzon Law) is strictly prohibited.

Both public and private schools are invited to participate in the above-mentioned event. The following master teachers are invited to be the Area Facilitators of the levels specified below:

No.	Name of Teachers	School	Level	District
1	Myrell P. Dumigsi	Digos City NHS	Secondary	Secondary Schools District
2	Nesylda D. Alpacion	Digos City CES	Elementary	Digos Occidental District

Immediate dissemination and strict compliance of this Memorandum is directed.

DepEd Schools Division of Digos City  
 RECORDS SECTION

**RELEASED**  
 24-125-097

DATE: AUG 27 2024 TIME: 1:00 PM  
 BY: [Signature]

*ME*  
**MELANIE P. ESTACIO, PhD, CESO VI**  
 OIC - Schools Division Superintendent

Enclosed: As stated.

CID/jbc



Address: Roxas Street cor. Lopez Jaena Street, Zone II, Digos City 8002  
 Telephone No: (082)553-8396 | (082)553-8376 | (082)553-9170  
 | (082)553-8375

Re: 5th Philippine National Vedic Mathematics Olympiad

DEPED DIGOS CITY <digos.city@deped.gov.ph>

Thu 8/15/2024 8:56 AM

To: competitions@math-inic.com <competitions@math-inic.com>

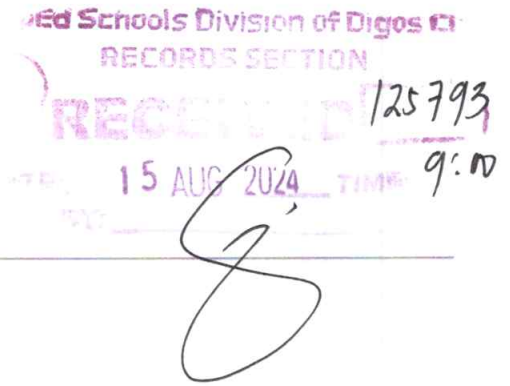
Received with thanks.

From: competitions@math-inic.com <competitions@math-inic.com>

Sent: Wednesday, August 14, 2024 9:54 PM

To: DEPED DIGOS CITY <digos.city@deped.gov.ph>

Subject: 5th Philippine National Vedic Mathematics Olympiad



Math made fun, fast and easy!

August 14, 2024

Ms. Melanie P. Estacio  
OIC - Schools Division Superintendent  
Division of Digos City

Re: 5<sup>th</sup> Philippine National Vedic Mathematics Olympiad

Dear Ms. Estacio,

Good day!

Last February, we sent you a letter asking for your help in inviting the teachers and learners in your division to participate in the scheduled Vedic Mathematics (VM) events this year. VM's unified system enabled many of our learners to gain deeper understanding of the subject, showing that basic arithmetic methods can be applied in higher Mathematics. Our students also demonstrated that they could dispense with their smartphones and other calculating devices in solving problems as evidenced by their dominating performance in the past 3 International Vedic Math Olympiads (IVMO). In IVMO 2023, the Philippines got 95% of the awards given: 244 gold, 488 silver and 746 bronze medals and 1376 merit certificates.

Today, we are asking your help again to inform the schools in your division about the 5<sup>th</sup> National Vedic Mathematics Olympiad on September 28, 2024. This is considered as the second training event to prepare mathletes who want to compete in IVMO 2024 on November 30, 2024. The online competition is scheduled on a Saturday so it will not interfere with the regular classes and participation is purely voluntary.

Attached is the mechanics for event.

Interested teachers and students may visit the MATH-Inic Philippines Facebook page, <https://www.facebook.com/MATHInicPhils> or they can e-mail us at [competitions@math-inic.com](mailto:competitions@math-inic.com) for more information.

We are looking forward to your favorable response. Thank you very much!

Sincerely,

Virgilio Prudente  
MATH-Inic Philippines

## **5<sup>th</sup> Philippine National Vedic Mathematics Olympiad**

Since 2021, MATH-Inic Philippines annually organizes two annual national competitions to promote Vedic Mathematics (VM) in Philippine schools: the MATH-Inic Vedic Mathematics National Challenge (MVMNC) and the Philippine National Vedic Mathematics Olympiad (PNVMO). VM is a complete, simplified, and unified system of mathematics which is fast gaining popularity worldwide.

The MVMNC and PNVMO are part of MATH-Inic Philippines' efforts to help improve our math education system, which is among the poorest in the world, based on the latest PISA assessments. Specifically, these competitions aim to

- a) Improve the learners' appreciation of mathematics.
- b) Show that math can be fun, fast, and easy.
- c) Train the participants to use flexible VM solutions rather than the rigid conventional solutions to solve common problems.
- d) Encourage the learners to think of creative approaches to new types of problems.
- e) Show that basic arithmetic principles are applicable in higher math.
- f) Provide excellent training to compete in the International Vedic Mathematics Olympiad, which is the most prestigious VM competition in the world.

The MVMNCs focus on teaching the VM basics while the PNVMOs aim to develop speed in computing.



## **5<sup>th</sup> Philippine National Vedic Mathematics Olympiad**

**Date:** Sept 28, 2024

**Time:** 10:00 to 11:00 AM

### **Mechanics:**

- 1) The competition will be online, using Google Quiz, and the conduct of the participants will be monitored by the area facilitators and their assistants.

The use of one or two devices may be required, depending on the set-up to be implemented in the center. Contestants taking the test in their own homes need to have two devices: one gadget to access the Google Quiz and the other, with a camera, so that he or she can be observed by the facilitator.

The participants may also be gathered in a room with a reliable internet connection where the facilitator can watch them. In this case, only one device is needed to connect to Google quiz.

A combination of the two may be adapted in a center.

- 2) The competitions will be in six categories based on the age of the contestants on November 30, 2024, which is the date of the 4<sup>th</sup> International Vedic Mathematics Olympiad (IVMO 2024). This is to ensure that the contestants will be able to participate in the same category in the two competitions.
  - a) Beginners: 9 years or younger (born after Nov 30, 2014)
  - b) Primary: 11 years or younger (born after Nov 30, 2012)
  - c) Juniors: 13 years or younger (born after Nov 30, 2010)
  - d) Intermediate: 16 years or younger (born after Nov 30, 2007)
  - e) Seniors: 18 years or younger (born after Nov 30, 2005)
  - f) Open: any age

- 3) The participants will be given 60 minutes to answer forty multiple choice questions in Google Quiz. Correct answers to
  - a) questions 1 to 25 will be given two points each,
  - b) questions 26 to 35 will be given three points each, and
  - c) questions 36 to 40 will be given four points each.
- 4) The top 30% of the competitors in each category will be given Certificates of Recognition and Gold, Silver, and Bronze Medals in the ratio of 1:2:3.
- 5) The next 30% will receive a Certificate of Merit each.
- 6) The non-winners will each receive a Certificate of Participation.
- 7) Most questions can be answered using the traditional methods, but knowledge of Vedic Math is an advantage. Some questions cannot be solved without knowledge of VM sutras and techniques.

**Registration:** The participants shall register with the accredited Area Facilitator in their school, district, or division not later than September 15, 2024.

**Coverage:** The coverage shall be the same as that of IVMO 2023. The coverage of the Beginners and Primary categories in the 5<sup>th</sup> PNVMO which are referred to as Lower Primary and Upper Primary in the IVMO are the same, but the figures and the problems to be given in the Beginners group would be easier to solve than those in the Primary group. The Seniors and Open Categories will also have the same coverage.

Beginners and Primary:

- Four basic arithmetic operations on whole numbers, fractions, and decimals
- Simple divisibility rules: 2, 4, 8, 3, 6, 9, 5, 10
- Digit sums

- Doubling and halving
- Nikhilam Multiplication
- Squaring numbers ending in 5
- Multiplying “complementary numbers”
- Vertically and crosswise multiplication.
- Nikhilam Multiplication
- HCF and LCD using vertically and Crosswise
- Linear sequences
- Area and perimeter of simple shapes
- Primes, square and triangular numbers

Sutras involved:

- All from 9 and the last from 10
- Vertically and Crosswise
- By one more than the one before
- Proportionately
- By Addition and by subtraction
- By observation
- By the Last digits

Juniors:

- Four basic arithmetic operations on whole numbers, fractions, and decimals
- Fractions to decimal conversion and vice versa
- Squaring numbers close to a base
- Using bar numbers
- Paravartya division
- Straight division with 2-digit divisors
- Percentages
- Direct and indirect proportion
- Finding the nth term in a linear sequence
- Linear equations
- Simple rules of indices
- Mean, median and mode

- Area and circumference of a circle
- Volume and surface Areas
- Angles in parallel lines, triangles, and quadrilaterals

**Sutras Involved:**

- Deficiency
- Transpose and Adjust
- On the Flag
- By Elimination and Retention
- All the multipliers

**Intermediate:**

- Converting fractions with denominators ending in 9 into decimals
- Conversion of partially recurring decimals into fractions
- Straight division with 3-digit divisors
- Simultaneous linear equations
- Quadratic equations
- Nth terms for quadratic sequences
- Completing the square
- Difference of two squares
- Cubing 2-digit numbers
- Combined ratios
- Polynomial division with binomial divisors
- Polynomial multiplication
- Factor theorem
- Indices (including fractional and negative)
- Using last digits to check the answer
- Angles in polygons
- Equations of straight lines
- Similar areas and volumes

**Sutras Involved:**

- By completion or non-completion
- The general and the particular
- Product of the means, product of the extremes



### Open:

- Coefficients in polynomial products
- Using the first and last terms in polynomials
- Series expansion in polynomials
- Application of discriminants in quadratics
- Divisibility by osculation
- Logarithmic and exponential functions
- Inverse functions
- Method of differences
- Areas of shapes in coordinate axes
- Equations of circles

### Seniors

- Triples
  - Pythagorean triples
- Triple Geometry
  - Addition and subtraction of angles
  - Geometric problems involving triples
- Calculus
  - Chain rule
  - Integration to find areas
  - Product and quotient rules
  - Partial fractions

### Sutra involved:

Differential Calculus



### **Area Facilitators and Trainers:**

1. The Area Facilitators (AFs) may be accredited for a school, a district, or a division. They are also Facilitators-at-Large for those areas with no AFs.
2. The AFs are responsible for inviting learners and teachers to join, supervising their training, and administering the 5<sup>th</sup> PNVMO in their area.
3. New AFs may register here <https://math-inic.org/joinf/> until August 31, 2024. AFs in the 4<sup>th</sup> MVMNC need not register again.
  - a) Once registered for the 5<sup>th</sup> PNVMO, the AFs are automatically considered as affiliates of MATH-Inic Philippines and entitled to discounts and commissions for purchases of MATH-Inic products and courses.
  - b) A page profile will be created for every affiliate which can be posted in social media.
4. Aside from the Area Facilitators, other teachers may help in the training of participants but only those who have completed the Vedic Mathematics Teacher Training Course (VM TTC) or who have passed the Foundation Level: Distinction assessment of the Institute for the Advancement of Vedic Mathematics (IAVM) will receive their certificate as coach.
5. Recordings of a special 5-session “course” on VM basics will be conducted for free for trainers under a registered AF.

### **Review Materials:**

There are a lot of review materials available for students and teachers:

Free Resources:

- 1) Files section of the Philippine National Vedic Math Olympiad FB page (<https://www.facebook.com/groups/419302608636234>)

- 2) Website of the Institute for the advancement of Vedic Mathematics (<https://instavm.org/competitions/>)
- 3) Blogs section of the MATH-Inic Philippines site (<https://www.math-inic.com/>)
- 4) MATH-Inic Newsletter. Subscribe now at <https://bit.ly/MathinicNewsSignup>

See more resources at MATH-Inic Philippines site.

**Other Awards:**

- 1) Every Area Facilitator will receive a Certificate of Recognition from MATH-Inic Philippines.
- 2) Accredited coaches shall receive their Certificate of Recognition
- 3) Each participating school or division will receive a Certificate of Appreciation.
- 4) Additional special awards may be given at the discretion of the organizer.

Please write to [competitions@math-inic.com](mailto:competitions@math-inic.com) for further details.