



Republika Ng Pilipinas
KAGAWARAN NG EDUKASYON
Rehiyon XI
SANGAY NG LUNGSOD NG DABAW
Lungsod Ng Dabaw
<http://www.deped-davaocity.ph>



1st Indorsement
September 11, 2017

Respectfully referred to the **Cluster Heads of the Secondary School and Private Secondary School Principals/Administrators**, the herein letter of Jonald P. Penecios, Ph.D Math and Regional PMO Coordinator with attachments inviting all secondary schools including senior high schools whether public or private in Davao City to join the 20th Philippine Mathematical Olympiad on October 28, 2017 to be held at the Ateneo de Davao University, Jacinto Campus with information that this office interposes no objection provided that participation shall be voluntary, that there shall be no disruption of classes pursuant to DepED Order No. 9, s. 2005 entitled: "Instituting Measures to Increase Engaged Time-on-Task and Ensuring Compliance Therewith," that no DepED funds shall be utilized for the said purpose and in exigency of service, DepEd activities shall be prioritized, for your information, guidance and appropriate action.

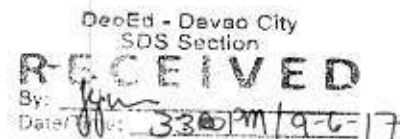
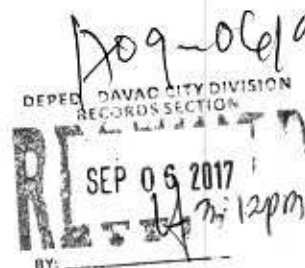

MARIA INES C. ASUNCION, CESO VI
Schools Division Superintendent 

Incl. as stated:



September 06, 2017

MARIA INES C. ASUNCION, CESO IV
Schools Division Superintendent
Division of Davao City
Department of Education – REGION XI
E. Quirino Avenue, Davao City



Dear Madam Asuncion:

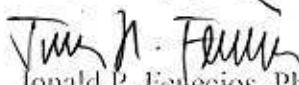
Warm greetings!

I am writing to you to request your good office to help us disseminate the invitation by the Mathematical Society of the Philippines (MSP) to all secondary schools including senior high schools whether public or private in Region XI to join the 20th Philippine Mathematical Olympiad on October 28, 2017 to be held at the Ateneo de Davao University, Jacinto Campus. I am attaching the relevant documents pertaining to the event: the invitation, application form and brochure of the event. The principal together with the participants needs to fill-up the application form and submit the same to the undersigned on or before October 05, 2017.

As a brief background, the Philippine Mathematical Olympiad (PMO) is the oldest and the most prestigious nationwide mathematics competition among secondary school students. Further, it is designed to find the best students in mathematical problem solving in the whole country who will represent the Philippines later in the International Mathematical Olympiad (IMO). The likelihood of getting the best students to represent the country in the IMO is enhanced if the invitation will reach as many secondary schools as possible under your jurisdiction. Thus, we are humbly seeking your assistance in this endeavor.

Thank you very much and more power.

Respectfully yours,


Jonald P. Fenecios, PhD Math
Regional PMO Coordinator
Chairperson and Associate Professor
Department of Mathematics
Ateneo de Davao University
Email: jpfenecios@addu.edu.ph
Mobile No. : 0932-729-1855



PHILIPPINE MATHEMATICAL OLYMPIAD

Dear Sir/Maam,

Brought to you by



In partnership with



The Mathematical Society of the Philippines (MSP) invites your school to send your best students to participate in the **20th Philippine Mathematical Olympiad (PMO)** – the country's oldest and most prestigious nationwide math competition among secondary school students.

The 20th PMO is designed to select the country's best students in mathematical problem-solving. It is mainly among individual students and is to be done through three levels of competition beginning from the qualifying stage, to the area stage (Luzon, Visayas, Mindanao, and NCR) and moving on to the national stage. For more information, please see attached brochure or visit our website: pmo.ph

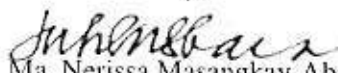
To participate, kindly ask each student to fill out a copy of the attached application form. Please send the accomplished application forms to the PMO coordinator of your region by **October 5, 2017**. Please refer to the brochure for his/her contact details.

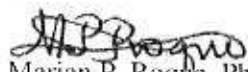
The qualifying stage of the PMO will be on **October 28, 2017** at 1:00 pm. The assigned testing center for your region is also stated in the brochure. However, if you prefer to take the first stage in a different testing center, please inform your regional coordinator and the coordinator of the testing center where you want to take it, by October 5. Each participating student will be charged **PhP 150.00** upon registration.

For further inquiries, you may e-mail us at pmo@math.upd.edu.ph.

Thank you very much.

Respectfully yours,


Ma. Nerissa Masangkay-Abara, Ph.D.
Director, PMO


Marian P. Roque, Ph.D.
President, MSP

Tel. Nos.

(632)9280439

(632)9272686

Telefax

(632)9201009

Websites

pmo.ph

mathsoceity.ph

APPLICATION FORM

CONTESTANT INFORMATION

Last Name			
First Name			
Middle Name	Suffix		
Year Level	Birthdate		
Contact No.*	Sex		
E-mail Add.*			

SCHOOL INFORMATION

Name			
Address			
Tel. No.			
Principal			

COACH'S INFORMATION

Name			
Contact No.*			
E-mail Add.*			

**Important Note: Please provide the student and coach's contact number and email address (if available) as contest reminders and details will be disseminated via SMS and e-mail.*

Other Reminders

1. All application forms must be submitted to the PMO Regional Coordinator assigned to your area on or before **October 5, 2017**. If physical submission is not possible, you may submit **clear scanned copies** of the form through email or through fax. Please refer to the brochure for your regional coordinator's email and fax number.
2. A registration fee of 150 PHP will be charged upon the submission of the application form.
3. Please visit the official PMO website, <https://pmo.ph>, and Facebook page, <https://www.facebook.com/PhilippineMathematicaOlympiad>, for other updates.

This part is to be filled in by the School Principal or Registrar.

The applicant's Final Grade in Mathematics for the School Year 2016 – 2017 was _____

School Principal
(signature over printed name)



**PHILIPPINE
MATHEMATICAL
OLYMPIAD**

Brought to you by:



In partnership with:



Tel. Nos.

(632)9280439

(632)9272686

Telefax

(632)9201009

Websites

pmo.ph

mathsoceity.ph

Regional Coordinators

Region 1 & CAR JERICO BACANI

Chair, Department of Mathematics
and Computer Science
University of the Philippines Baguio
Governor Pack Road, 2600 Baguio City
Tel/Fax No.: (074) 4423688 (074)4427231
Mobile: 09294887455
email: jicderivative@yahoo.com

Region 2 CRIZALDY BINARAO

Cagayan State University, Tuguegarao City
Tel No: (078) 304-0802.
Mobile No.09209818036 / 09178778122
Email: cpt_csu@yahoo.com

Region 3 EDUARD TAGANAP

Central Luzon State University: Science
City of Munoz, 3120, Nueva Ecija
Cellphone No. 09227179976
Email: 20thpmor3@gmail.com

Region 4A SHARON LUBAG

De La Salle University - Dasmariñas
DBB-B City of Dasmariñas 4115
Tel No.: (046) 481-1900 to 1930 local 3087
Mobile No: 09163283417
Email: splubag@dlsud.edu.ph

Region 4B SHEILA GRACE SORIANO

College of Arts and Sciences
Western Philippines University, Aborlan, Palawan
Mobile No.: 09077366213
Email: sheilagracesoriano@gmail.com

Region 5 JOEL NOCHE

Department of Mathematics
Ateneo de Naga University, Naga City
Tel No: (054) 472-2368 loc 2540
Mobile No. 09165787247
Email: jnoche@gbox.adnu.edu.ph

Region 6 FERDINAND MONOSO

Math and Physics Department
Central Philippine University
Jaro, Iloilo City 5000
Mobile: 09173025122
Email: fmonoso@yahoo.com

Region 7 & NIR LORNA ALMOCERA

University of the Philippines, Cebu
Lahug, Cebu City 6000
Telefax No.: 032-2338203
Mobile No.: 0917 3276390
Email: lsalmocera@yahoo.com

Region 8 ORESTE ORTEGA

Leyte Normal University, Tacloban City
(053) 321-6628, Fax: (053) 325-6122
Mobile: 09284057565
Email: oresteortegajr@lnu.edu.ph

Region 9 ROCHELLEO MARIANO

Dean, College of Science and
Information Technology
Ateneo de Zamboanga University
La Purisima St., Zamboanga City
Tel Nos: (062) 991- 0871 local 2243 or 2245
Mobile No. 0906 6269260
Email: romeo_4747@yahoo.com
marianoroco@adzu.edu.ph

Region 10, 12, & ARMM GINA MALACAS

MSU-Iligan Institute of Technology, Iligan City
Tel No:(063) 221-4050 loc 140.
Fax: 221-4068 Mobile: 09067821949
Email: ginastrong_frappe@yahoo.com

Region 11 JONALD FENECIOS

Ateneo de Davao University
Roxas Ave., Poblacion District, Davao City, 8000
Tel. No. (082) 222-2411 local 8320
Mobile No. 09327291855
E-mail: jpfenecios@addu.edu.ph

Region 13 MIRALUNA HERRERA

Mathematics Department
Caraga State University
Butuan City
Tel Nos: (085) 342-0326, Fax:(085)3421079
Mobile: 09177707068
Email: miraherrera71@yahoo.com

NCR DENNIS LEYSON & RENIER MENDOZA

Institute of Mathematics
University of the Philippines—Diliman
Mobile: 09266479325
Tel. No.:9201009
Email: 20thpmnocr@gmail.com

PMO CORE COMMITTEE

Director: MA. NERISSA MASANGKAY-ABARA

Secretary: MAY ANNE TIRADO

Treasurer: VICTORIA MAY PAGUIO

Brought to you by:



In partnership with:



Manulife
BUSINESS PROCESSING SERVICES

HARI
HUMAN ASIA RESOURCES, INC.
FOUNDATION

The 20th Philippine Mathematical Olympiad

What is PMO?

The Philippine Mathematical Olympiad is the oldest and most prestigious nationwide mathematics competition among high school students. The 20th PMO is designed to select the best high school students in mathematical problem-solving through a friendly competition.

Objectives

The PMO aims to:

- stimulate the improvement of mathematics education in the country by awakening greater interest in and appreciation of mathematics among students and teachers and gaining insights into the levels of mathematics learning;
- identify and motivate the mathematically gifted;
- identify potential participants to the International Mathematical Olympiad;
- provide a vehicle for the professional growth of teachers; and
- encourage involvement of public and private sectors in the concerted promotion and development of mathematics education.

General Guidelines and Scheme of Conduct

The 20th PMO is open to all junior and senior high school students. It shall be carried out in three stages:

- Qualifying Stage 28 October 2017 (Sat):** The Qualifying Stage is a multiple choice exam which will be administered in each area (Luzon, Visayas, Mindanao, NCR). There will be one testing site for each region.
- Area Stage 25 November 2017 (Sat):** The Area Stage is a written competition among students in each area who will qualify based on their performance in the Qualifying Stage.
- National Stage 20 January 2018 (Sat),** The National Stage is a written and oral competition among the winners of the Area Stage competition. This will be held in Metro Manila.

Test development (preparation, analysis and evaluation of questions and problems to be used in the competition) begins in September 2017 and continues throughout the year.

For more information, visit our website at pmo.ph
For inquiries, email us at pmo@math.upd.edu.ph

Participants' Qualifications

Qualifying Stage

- This competition shall be open to all junior and senior high school students in the country. Each of the participating schools may send a maximum of 30 contestants.
- Any bona fide student of private or public secondary high schools as specified above with a final grade of 88% (or its equivalent) in mathematics in the previous school year may apply.
- Participants will be asked to pay PHP 150.00 upon registration to the PMO coordinator of their region.

Area Stage

- The participants with the top fifty scores per area (Luzon, Visayas, Mindanao and NCR) will qualify for the area stage.

National Stage

- The participants from the area stage with the top twenty scores in national ranking will qualify for the national stage.

Format of the PMO Competition

Qualifying Stage

- The qualifying stage competition is a 25-item multiple-choice exam consisting of
 - Fifteen problems worth 2 points each
 - Ten problems worth 3 points each
- And five problems that will require answers only worth 6 points each

Area Stage

- The area stage competition is in the form of a written exam consisting of
 - 20 problems that will require answers only;
 - 3 open-ended problems that will require full solutions.

National Stage

- This competition shall have two phases: the written phase and the oral phase.
 - In the written phase of the competition, the contestants will be given 4.5 hours to answer 4 open-ended problems that require full solutions.
 - In the oral phase of the competition, 30 problems are to be read to the participants. These problems are to be answered within a specified time for each item. This phase is open to the public.

Selection of Winners

Qualifying Stage

The answer sheets will be checked and scored by a team designated by the PMO Technical Committee. The checkers will be selected so that each one is not related up to a second degree of consanguinity or affinity to any PMO participant. None of them will be teaching in any secondary school in the country. Each paper will be checked and double checked so as to ascertain the correctness of the scores.

Area Stage

The answer sheets will be checked by a board of judges which consists of college/university professors of mathematics who are not related up to a second degree of consanguinity or affinity to any PMO participant, and who are not teaching in high school.

Each correct answer in the first portion will merit 3 points. A complete and correct solution in the open-ended portion will merit 10 points. Partial points may be given in the open-ended portion as decided by the board of judges.

National Stage

Written Phase

The answer sheets will be checked by a board of judges which consists of four college/university professors of mathematics who are not related up to a second degree of consanguinity or affinity to any PMO participant, and who are not teaching in high school.

A complete and correct solution will merit 7 points. Partial points may be given as decided by the board.

Oral Phase

The board of judges shall consist of three members appointed by the PMO Committee.

- The thirty problems will be divided as follows:
- 15 problems worth 2 points each
 - 10 problems worth 3 points each
 - 5 problems worth 6 points each

The participants will be ranked according to the following basis:

- 70% of the score in the written phase plus
 - 30% of the score from oral phase
- The top three participants and their coaches will be given trophies and cash awards.

The national finalists of the PMO will be invited to the Mathematical Olympiad Summer Camp (MOSC) for the International Mathematical Olympiad. The IMO is the largest and most prestigious annual international mathematics competition among secondary school students. The representatives of the country to the IMO will be selected from the participants of the MOSC.

Awards and Prizes for the PMO

Area Stage		National Stage	
1 st Place	Student Coach School	1 st Place	Student Coach School
	Medal Certificate Certificate		P 20000 and Medal P 5000 and certificate Trophy
2 nd Place	Student Coach School	2 nd Place	Student Coach School
	Medal Certificate Certificate		P 15000 and Medal P 3000 and certificate Trophy
3 rd Place	Student Coach School	3 rd Place	Student Coach School
	Medal Certificate Certificate		P 10000 and Medal P 2000 and certificate Trophy

Regional Testing Centers

Region 1/CAR	University of the Philippines Baguio City	Region 8	Leyte Normal University, Tacloban City
Region 2	Cagayan State University-Cang Campus, Tuguegarao City	Region 9	Carlos Dominguez Hall, Ateneo de Zamboanga University, Zamboanga City
Region 3	Central Luzon State University City of Muroz, Nueva Ecija	Regions 10	CSM Annex Building Mindanao State University – Iligan, Institute of Technology, Iligan City
Region 4A	Math Building, UP Los Baros, OR	Region 11	Ateneo de Davao University Davao City
Region 4B	Western Philippines University – Puerto Princesa City Campus Sta. Monica Heights, PPC	Region 12*	CSM Annex Building Mindanao State University – Iligan, Institute of Technology, Iligan City
Region 5	Ateneo de Naga University, Naga City	Region 13	College of Education Building Caraga State University Ampayon, Butuan City
Region 6	Central Philippine University Jaro, Iloilo City	NCR	University of the Philippines—Diliman
Region 7	AS Building, UP Cebu College, Cebu City		

*May take the qualifying exam at the testing center nearest them.

Area Coordinators

Qualifying Stage	Area Stage	National Stage
JASMIN-MAE SANTOS Institute of Mathematics University of the Philippines-Diliman jsantos@math.upd.edu.ph Mobile: 09209480820	RIGOR PONSONES Math Department De La Salle University rigor.ponsones@dlసు.edu.ph 09175347826	LEN PATRICK DOMINIC GARCES Ateneo de Manila University lgarc@ateneo.edu Mobile: 09178998845 Tel. No. 4266001 local 5682