Regional Coordinators

Region 1 & CAR DR. JERICO BACANI

Department of Mathematics and Computer Science University of the Philippines Baguio Governor Pack Road, 2600 Baguio City Tel/Fax No. : (074) 4423888 (074)4427231 Mobile: 09437250761 email: iicderivative@vahoo.com

Region 2 MR. CRIZALDY BINARAO

Cagayan State University, Tuguegarao City Tel No: (078) 304-0802. Mobile No.09209818036 / 09175743409 Email: cpb_csu@yahoo.com

Region 3 DR. JUMAR VALDEZ

Graduate School, Tarlac State University, Tarlac City Tel No: (045) 982-5574, Fax: 982-0110 Mobile No. 0917 517 1713 Email: valdezjumar@vahoo.com.ph

Region 4A MS. SHARON P. 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 MS. SHEILA GRACE SORIANO

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

Region 5 SOLOMON L. OLAYTA

Department of Mathematics Ateneo de Naga University, Naga City Tel No: (054) 473-0756, 473-6447 loc 2126 Mobile No. 09273227481 Email: solomonolayta@yahoo.com Region 6 MS. SALVIE MARIE A. FUENTES

> Division of Physical Sciences and Mathematics University of the Philippines Visayas Miag-ao, Iloilo 5023 Mobile: 09176211689/09288966116 Tel Nos:(033) 513 7020 Fax:(033) 513 8785 Email: smaf091291@gmail.com

Region 7 DR. LORNA ALMOCERA

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

Region 8 MR. ARIEL G. SALARDA

Leyte Normal University, Tacloban City (053) 321-5628, Fax: (053) 325-6122 Mobile: 09173257244 Email: arielgsalarda@gmail.com

Region 9 DR. ROCHELLEO E. MARIANO

Math Department 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 marianoroce@adzu.edu.ph

Region 10, 12, & ARMM

DR. 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 DR. EVEYTH P. DELIGERO

Dean, College of Arts and Sciences University of Southeastern Philippines 8000 Davao City Tel/Fax No. (082) 227-8192 local 235 Mobile No. 0922 8711181 E-mail: evedeligero@yahoo.com

Region 13DR. MIRALUNA HERRERA

Mathematics Department Caraga State University CSU Science and Technology Complex, Butuan City. Tel Nos: (085) 342-0326, Fax:(085)3421079 Mobile: 09308636155 Email: mirherrera71@yahoo.com

NCR LEMUEL MARTIN

Ateneo de Manila University Mobile: 09165763575 Tel. No.:4266001 local 5682 Fax: 4266125 Email: jlmartin@ateneo.edu

PMO CORE COMMITTEE

Director: RICHARD S. LEMENCE Secretary: MAY ANNE C. TIRADO Treasurer: JOHNATHAN S. PIMENTEL



The 17th Philippine Mathematical Olympiad

What is PMO?

The Philippine Mathematical Olympiad is the oldest and most prestigious nationwide mathematics competition among high school students. The 17th 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;
- dentify 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 17th PMO is open to all high school students. It shall be carried out in three stages:

- 1. Qualifying Stage **11 October 2014 (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.
- 2. Area Stage **15** November **2014 (Sat)**: The Area Stage is a written competition among students in each area who will qualify based on their performance in the Qualifying Stage.
- 3. National Stage 24 January 2015 (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 August 2014 and continues throughout the year.

For more information, visit our website at http://www.math.admu.edu.ph/pmo For inquiries, email us at pmo@math.upd.edu.ph

Participants' Qualifications

Qualifying Stage

- This competition shall be open to all high school students in the country. Each of the participating schools may send a maximum of 20 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 a minimal amount of 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 multiplechoice exam consisting of
- Fifteen questions worth 2 points each
- Ten questions worth 3 points each
- And five questions 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 questions that will require answers only;
- 3 open-ended questions 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 3 hours to answer 5 open-ended questions that require full solutions.
- In the oral phase of the competition, 30 questions are to be read to the participants. These questions 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 openended 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 five 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 questions will be divided as follows:
- 15 questions worth 2 points each
- 10 questions worth 3 points each
- 5 questions 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 qualified to join in the International Mathematical Olympiad Summer Camp (IMOSC). 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 IMOSC.

Awards and Prizes for the PMO

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

Regional Testing Centers

Region 1/CAR	University of the Philippines Baguio City	Region 9 Regions 10	Carlos Dominguez Hall, Ateneo de Zamboanga University,	
Region 2	Cagayan State University Carig Campus, Tuguegarao City		Zamboanga City	
Region 3	College of Business Administration, Tarlac State University, Tarlac City		CSM Annex Building Mindanao State University – Iligan, Institute of Technology, Iligan City	
Region 4A	De La Salle University - Dasmariñas	Region 11	University of the Southeastern	
Region 4B	Western Philippines University – Puerto Princesa City Campus Sta. Monica Heights, PPC	Region 12* & ARMM*	Philippines, Obrero, Davao City CSM Annex Building Mindanao State University – Iligan,	
Region 5	Ateneo de Naga University, Naga City	Region 13	Institute of Technology, Iligan City College of Science Education Building Caraga State University Ampayon, Butuan City	
Region 6	UPV Auditorium, University of the Philippines			
I . Dogion 7	Visayas, Iloilo City	NCR	Ateneo de Manila University,	
I Region 7	AS Building, UP Cebu College, Cebu City			
Pegion 8	Leyte Normal University, Tacloban City	*May take the qualifying exam in the testing center nearest them.		

Area Coordinators

Qualifying Stage	Area Stage	National Stage	
DR. MA. NERISSA MASANGKAY	DR. RIGOR PONSONES	DR. RECTO REX M CALINGASAN	
Institute of Mathematics, University of the Philippines-Diliman issa.math.upd.edu.ph 09209480820 / 09328573322	Math Department De La Salle University rigor.ponsones@dlsu.edu.ph 09175347826	Health Service Building, University of Sto. Tomas rexcali@yahoo.com Tel.: 7811821 Mobile: 0917501467	