



*Tanggapan ng Kalihim*  
*Office of the Secretary*

DepED MEMORANDUM  
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2004 PHILIPPINE MATHEMATICAL OLYMPIAD

To: Bureau Directors  
Regional Directors  
Schools Division/City Superintendents  
Heads, Public and Private Elementary and Secondary Schools

1. The Mathematical Society of the Philippines (MSP), the Department of Science and Technology (DOST) and the Department of Education (DepED) announce the conduct of the 2004 Philippine Mathematical Olympiad (PMO) from January to April 2004. This is a national competition that draws the brightest high school students in the country.
2. The PMO is a nationwide mathematics competition among secondary students. The best students in mathematics are selected from a series of individual and team competitions. It aims to:
  - a. stimulate the improvement of mathematics education in the country by awakening interest in and appreciation of mathematics among students and teachers and gaining insights into the levels of mathematics learning;
  - b. identify and motivate the mathematically gifted;
  - c. provide a vehicle for the professional growth of teachers; and
  - d. encourage the involvement of public and private sectors in the concerted promotion and development of mathematics education.
3. The PMO is open to 3<sup>rd</sup> and 4<sup>th</sup> year high school students and will be carried out in three stages:

Regional Stage	January 23, 2004	all 16 regions
Area Stage	February 27, 2004	Luzon, Visayas, Mindanao and NCR
National Stage	April 2004	Davao City
4. The details regarding the contest are enclosed.
5. For more information, please contact Ms. Blessilda P. Raposa, Ph.D., President, Mathematical Society of the Philippines and Chairperson, Mathematics Department, De La Salle University, telefax no. 536-02-70 and 524-46-11 loc. 420.
6. Immediate and wide dissemination of this Memorandum is desired.

EDILBERTO C. DE JESUS  
Secretary

Encls.:  
As stated

Allotment: 1—(D.O. 50-97)

To be indicated in the Perpetual Index  
under the following subjects:

CONTESTS  
Learning Area, Mathematics  
SOCIETY or ASSOCIATIONS  
PUPILS  
STUDENTS

DM-2004 PMO Philippine Math Olympiad  
Adams 11/27/03  
Rhea/Jovy/JoBM



## PHILIPPINE MATHEMATICAL OLYMPIAD

### 9<sup>th</sup> PHILIPPINE MATHEMATICAL OLYMPIAD (PMO) January 2004 – April 2004

#### I. Project Description, Objectives and Historical Background

The Philippine Mathematical Olympiad (PMO) is a nation-wide mathematics competition among secondary school students. The best students in mathematics are selected from a series of individual and team competitions. 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;
- Provide a vehicle for the professional growth of teachers; and
- Encourage the involvement of public and private sectors in the concerted promotion and development of mathematics education.

The 9<sup>th</sup> PMO shall be open to 3<sup>rd</sup> and 4<sup>th</sup> year high school students and carried out in three stages:

- |                   |                   |                                  |
|-------------------|-------------------|----------------------------------|
| • Regional Stage: | January 23, 2004  | held in all 16 regions           |
| • Area Stage:     | February 27, 2004 | Luzon, Visayas, Mindanao and NCR |
| • National Stage: | April 2004        | held in Davao City               |

The PMO is formerly part of the youth-oriented projects of the Department of Science and Technology (DOST) implemented by the Mathematical Society of the Philippines (MSP) in cooperation with the Department of Education (DepEd). In the most recent PMO which was held in 2000-2001, more than 60,000 students participated in the divisional stage. Held every two years, the competition was previously mainly supported by the DOST and included budget for the conduct of national stage competitions. Due to financial constraints, the DOST is currently unable to finance the 9<sup>th</sup> PMO. To limit the cost of the competition, the 9<sup>th</sup> PMO shall cover the regional, area and national stages only. To cover some of the expenses of the competition, participants will be asked to pay fifty pesos (PhP 50.00) each as registration fee.

#### II. The Project Proponent

The PMO will be implemented by the Mathematical Society of the Philippines (MSP) and the Mathematics Trainers' Guild (MTG). The MSP is the largest professional organization of

tertiary school teachers and researchers with business office at the Department of Mathematics, University of the Philippines Diliman and registered with the SEC as a non-stock, non-profit organization. The MTG is a non-profit organization of public and private secondary and elementary school teachers and education professionals, which aims to provide quality training to gifted mathematics students and excellence education in the Philippines.

### **III. General Guidelines, Scheme of Conduct and Participants' Qualifications:**

#### **Regional Stage:**

- The competitions is open to year levels III and IV. At this stage, schools are encouraged to send at least three (3) contestants in order to qualify for the area school team competitions. Each school can send a maximum of ten (10) contestants.
- In the regional stage, each participant is given 90 minutes to answer a 40-item multiple-choice test.
- The same exam will be given to all contestants whether they belong to Year Level III or IV.
- Any participant who correctly answers at least 20 items shall be awarded a Certificate of Achievement.
- The regional stage results will be used to determine the qualifiers for the area stage.
- Any bona fide student of any private or public secondary school including state colleges and universities with a final grade of at least 86% (or its equivalent) in mathematics in the previous school year may apply.
- Participants will be asked to pay fifty pesos (PhP 50.00) each as registration fee to the MTG Coordinator nearest them.

#### **Area Stage:**

- The area stage competition will have two competition types: Individual and Team competitions.
- The competition guidelines and procedure for identifying the contestants for the regional stage shall be as follows:

##### **A. Individual Competition:**

- An overall ranking of the scores of all Certificate of Achievement awardees (students whose scores are 20 or above) of all the schools of a region shall be made. The top 5 awardees from among all schools of a region shall qualify for the area competition. In the NCR region, the top 25 awardees shall qualify for the area competition.
- The contestants shall answer 5 open-ended problems needing full solutions for 2.5 hours.
- The top 3 individual scorers, together with their coaches and schools, shall receive awards.

## **B. Team Competition**

- A school team shall consist of the 3 highest ranking contestants of a school which participates in the Regional Stage competition. A school must have at least 3 contestants to form a team.
- The school team score is the total score of the top 3 participants of the school. An overall ranking by year level of all school teams' scores of all schools of a region shall be made. The top 5 teams shall qualify for the area competition, provided the team school gets at least 50% of the total score of the test taken.
- 30 questions shall be given orally in a public presentation to be answered by all teams within a specified time for each item.
- The top 3 school teams, together with their coaches and schools, shall receive awards.

## **National Stage:**

The qualifiers to the National Stage will first undergo a five-day training in April on the week after Holy Week at a venue in Davao City, to be announced later. All qualifiers to the National Stage will have to take care of their own transportation expenses. However, board, lodging and training during the five-day training will be provided for free. The training will be conducted by top lecturers and trainers of MSP and MTG. On the Saturday after the five-day training, the National Stage competition will take place. The National Stage competition shall have two types of competition: Individual and Team.

### **A. Individual Competition**

- Contestants in all area competitions will be ranked. The national qualifiers are the top twenty (20) highest ranking individuals from all areas. They shall vie for first to third places.
- Contestants shall be made to answer five (5) open-ended problems needing full solutions for 2.5 hours.

### **B. Team competition**

- Team contestants in the area competitions will be ranked. The national qualifiers are the five (5) highest ranking teams from each area and all other teams in the top ten (10) over-all ranking. They shall vie for first to third places.
- The teams shall be given thirty (30) math problems, each to be answered within a specified time for each item in a public presentation.

#### IV. Awards and Prizes

##### A. Regional Stage

Certificate of Achievement  
(students with scores of 50% or higher)

Medals will be awarded to top 3  
scorers of a region.

Awarding will be done during the Area  
Stage.

##### B. Area Stage

###### Individual Competition

1 <sup>st</sup> Place	Student	P1,250	trophy
	Coach		certificate of merit
	School		certificate of recognition
2 <sup>nd</sup> Place	Student	P1,000	trophy
	Coach		certificate of merit
	School		certificate of recognition
3 <sup>rd</sup> Place	Student	P 750	trophy
	Coach		certificate of merit
	School		certificate of recognition

###### Team Competition

1 <sup>st</sup> Place	Students	P3,750	trophy
	Coach		certificate of merit
	School		certificate of recognition
2 <sup>nd</sup> Place	Students	P3,000	trophy
	Coach		certificate of merit
	School		certificate of recognition
3 <sup>rd</sup> Place	Students	P 2,250	trophy
	Coach		certificate of merit
	School		certificate of recognition

**Total per area P 12,000**

**Total for 4 areas P48,000**

##### C. National Stage

###### Individual Competition

1 <sup>st</sup> Place	Student	P2,500	trophy
	Coach		certificate of merit
	School		certificate of recognition
2 <sup>nd</sup> Place	Student	P2,000	trophy
	Coach		certificate of merit
	School		certificate of recognition
3 <sup>rd</sup> Place	Student	P1,500	trophy
	Coach		certificate of merit
	School		certificate of recognition

**Team Competition**

1 <sup>st</sup> Place	Students	P7,000	trophy
	Coach	P1,000	certificate of merit
	School		certificate of recognition
2 <sup>nd</sup> Place	Students	P5,000	trophy
	Coach	P 750	certificate of merit
	School		certificate of recognition
3 <sup>rd</sup> Place	Students	P3,000	trophy
	Coach	P 500	certificate of merit
	School		certificate of recognition
<b>Total</b>	<b>P 25,500</b>		