

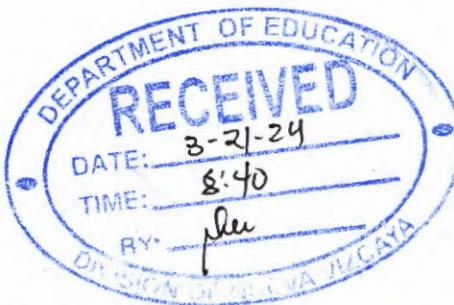


March 15, 2024

BENJAMIN D. PARAGAS  
 Regional Director  
 Department of Education  
 Region II

Sir:

Warm greetings!



Last January, the CSE NATIONAL MATH CHALLENGE was held with 3050 participants across the country. There was a 10% passing rate which is predicted proportional to actual Civil Service Exam Results ranging from 10-18%. It appears that even the simple lessons about percent (%) when put in a question like what is 0.05% of 240? What percent of 5/6 is 1/3? and especially when percent is put in the context of discount, discount rate, profit, population growth rate and other similar word problems, the conceptual understanding appears a challenge.

We realized that we need to provide the learners a ladder towards attaining mastery starting from Elementary Grade to Grade 12 by providing them a math competition according to the topics mastered and according to their mathematics proficiency to even include the students having a grade of 75-79 (Developing) who are not usually included during competitions. This set up is also the clamour of the coaches to allow their participants to participate according to their levels. We also find it nobler if the teachers will be able to challenge these less performing students, after all, they are the ones who need most of the benefits of CSE Mathematics in the future. If only during the graduation ceremony this May 2024, a student who has a grade of 75-79 will be awarded a medal for joining a CSE Math Competition, we believe it will motivate the parents and the community for them to support their children towards academic consciousness or academic excellence. It is also a way to close the disparity of privilege not to leave behind those less performing learners when they are the ones needing most.

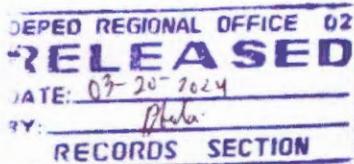
We humbly invite your region to join the **NUMERICAL ABILITY NATIONAL COMPETITION** on May 1, 2024. We wish the schools from your region can also join in this event and we wish your office can issue an advisory or whatever form of information dissemination for **VOLUNTARY** participation of learners.

*Herewith are the guidelines for the event.*

Very truly yours,

NELSON D. BUNGHAN  
 President-Phil-MATH-4E

MEMORANDUM		Date: 04-01-2024	Released (Records): <i>page</i>
To:	( <input checked="" type="checkbox"/> PSDS/DICs    ( <input type="checkbox"/> Elem/Sec School Heads		
	( <input type="checkbox"/> Private Schools    ( <input type="checkbox"/> Others:		
For:	( <input checked="" type="checkbox"/> Information    ( <input type="checkbox"/> Dissemination		
	( <input type="checkbox"/> Guidance		
ORLANDO E. MANUEL PhD, CESO V			
Schools Division Superintendent			
By:	<input type="checkbox"/> ASDS <input checked="" type="checkbox"/> CID Chief <input type="checkbox"/> SGCD Chief <input type="checkbox"/> AO <input type="checkbox"/> Atty	Signature: <i>[Signature]</i>	



March 20, 2024

To: Schools Division Superintendents

For information, dissemination and appropriate action.

*PSR*

**BENJAMIN D. PARAGAS, PhD., CESO III**  
 Director IV/ Regional Director

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## NUMERICAL ABILITY NATIONAL COMPETITION GUIDELINES

### A. Competition Format

- The competition will be a 40-item multiple choice test for 1 hour to be done using online platform.
- The competition will be done 9:00 – 10:00 AM of May 1, 2024.

### B. Topics and Participants per Category

Competition Category	Topics Covered	Participants
Level 1	A. Operations on 1. integers 2. decimals 3. fraction 4. percentage-rate-base 5. LCM 6. GCF 7. squaring of whole numbers and decimals 8. Simple sequences B. Word Problems involving the 1-6 operations	1) Elementary Grades (Any grade level who can perform the topics covered)
Level 2	A. Operations on 1. integers 2. decimals 3. fraction 4. percentage-rate-base 5. LCM 6. GCF 7. squaring whole numbers and decimals 9. Square roots 10. Simplifying Numerical Expressions 11. Laws of Exponents 12. Linear Equations in 1 Variable 13. simple sequences 14. Use of Venn Diagram 15. Ratio and Proportion B. Word Problems involving 1-6 & 14-15	1) Grade 7 learners 2) Grade 8 with a grade of 75-79 (Average of Quarter 1 and 2)
Level 3	A. Operations/Concepts on 1. integers 2. decimals 3. fraction 4. percentage-rate-base 5. LCM 6. GCF 7. squaring whole numbers and decimals 9. Square roots 10. Simplifying Numerical Expressions 11. Laws of Exponents 12. Linear Equations in 1 Variable 13. Systems of Linear Equations (Two Variables) 14. sequences and number analogy 15. Use of Venn Diagram 16. Ratio and Proportion 17. Geometry concepts on perimeter, area and volume 18. Simple age, digit and number problems B. Word Problems involving 1-6 & 15-18	1) Preferably Grade 8 Learners 2) Grade 7 learners who can perform the given topics 3) Grade 9 learners with a grade of 75-79 (Average of Quarter 1 and 2)
Level 4	A. Operations/Concepts on 1. integers 2. decimals 3. fraction 4. percentage-rate-base 5. LCM 6. GCF 7. squaring whole numbers and decimals 9. Square roots	1) Preferably Grade 9 2) Grade 7 or grade 8 learners who can perform the given topics 3) Grade 10 or grade 11 with a grade of 75-79 (Average of Quarter 1 and 2)

	10. Simplifying Numerical Expressions 11. Laws of Exponents 12. Linear Equations in 1 Variable 13. Systems of Linear Equations (Two Variables) 14. sequences and number analogy 15. Use of Venn Diagram 16. Ratio and Proportion 17. Geometry concept on perimeter, area and volume, angles and triangles 18. number problems 19. Digit problems 20. Age problems 21. Work problems B. Word Problems involving 1-6 & 15-21	
Level 5	A. Operations/Concepts on 1. integers 2. decimals 3. fraction 4. percentage-rate-base 5. LCM 6. GCF 7. squaring whole numbers and decimals 9. Square roots 10. Simplifying Numerical Expressions 11. Laws of Exponents 12. Linear Equations in 1 Variable 13. Systems of Linear Equations (Two Variables) 14. sequences and number analogy 15. Use of Venn Diagram 16. Ratio and Proportion 17. Geometry concept on perimeter, area and volume, angles and triangles 18. number problems 19. Digit problems 20. Age problems 21. Work problems 22. Speed-Distance-Time problems 23. Mixture problems 24. Interpreting graphs 25. Statistics and Probability B. Word Problems involving 1-6 & 15-25	1) Preferably grade 10 learners 2) Any student from grade 7-12 who can perform the given topics.

#### C. Awards for Pupils/Students

Gold Medal- score of 36-40 (90% and above performance rating)

Silver Medal- Score of 34-35 (85-89% performance rating)

Bronze Medal-Score of 32-33 (80-84% performance rating)

Distinction Awardees – Score of 28-31 (70-79% performance rating)

Merit Awardees – Score of 24-27 (60-69% performance rating)

Note:

- Topnotchers will be determined at a threshold of 80% performance rating. A maximum of Top 1-9 will be determined but it may be less depending on the highest score.
- Distinction and Merit Awardees will receive e-certificates of recognition while participants with performance rating below 60% will be given certificate of participation.
- The medallists will receive medals and e-certificate of recognition.
- The e-certificates will be linked to the Official Result so that the certificates are only valid when their names can be found in the link written on the certificate.

#### **D. Awards for Coaches**

Gold Medal-Top 1-10 Best Coach Award

Silver Medal– Top 11-20 Best Coach Award

Bronze Medal – Top 21-30 Best Coach Award

#### **Legend of Scoring:**

1 Gold – 5 points

1 Silver – 3 Points

1 Bronze – 2 Points

#### **Notes:**

1. The total points based on the scoring above will be the basis in determining the top 30 Best Coaches.
2. The top 30 Best coaches will be per category. This means that a coach may receive a maximum of 5 medals if he has entries in all levels. However, a coach needs to have a minimum of 15 participants per category if he intends to join the top 30 best coaches in that category. It should be noted that the minimum of 15 participants will be based from the successfully received entries in the Google form.
3. In case of tie in a certain rank (e.g. there are four coaches with the same score for top 1), the highest number of entries will be used to break the tie. In case the coaches have the same number of entries, the average of all participants will be used. In case all are even, the first to have registered will be the basis.

#### **E. Registration**

1. The coach will accomplish the registration form then save as Microsoft Excel file. Please copy and paste the table format in a separate Microsoft excel file using the name of file format (NAME OF SCHOOL\_NAME OF COACH). Please copy and paste the link to your browser to access the template (DO NOT JUST CLICK AS IT MAY NOT OPEN)

<https://docs.google.com/spreadsheets/d/1PViqvqgHeSctv5smnvoMnMEuGjyjw/ei/n?usp=sharing&gid=11344276076003369117&tqu=ttrue&dh=true>

2. The coach will collect and submit at once the registration fee of 200 pesos per participant for the contestants and a 200 pesos per coach to any of the following accounts.

Gcash-09684536857 (NE\*\*\*N B.)

Maya Philippines, INC./Maya Wallet – 09684536857 (philmath4e)

China Bank Savings (607002051917)

Land Bank – 0836310772

3. Take a screenshot of the transaction then attach beside the registration form in Microsoft Excel. Please see space provided in the form.

4. Send Registration Form with the screenshot at

Level 1 - [maenuccavier@gmail.com](mailto:maenuccavier@gmail.com)

Level 2 - [graduatescavins@gmail.com](mailto:graduatescavins@gmail.com)

Level 3 - [grayson1590001@gmail.com](mailto:grayson1590001@gmail.com)

Level 4 - [thrytall125@gmail.com](mailto:thrytall125@gmail.com)

Level 5 - [kenya1734@gmail.com](mailto:kenya1734@gmail.com)

5. The Deadline of Registration is April 13, 2024 at 10:00 PM.

5. A group chat link will be sent upon registration.

#### **F. Procedures and Reminders**

1. On April 30, 2024, the zoom links will be sent to the group chat of coaches.
2. 20 minutes before 9:00 AM of May 1, 2024, the coaches should instruct their participants to open zoom cameras. Please note that the coaches should make it clear to their participants to open their cameras and should not let the participants stay close to each other. 1 meter distance is highly encouraged. In case, they are answering on a round, please maintain 1 meter distances.
3. 10 minutes before 9:00 AM of May 1, 2024, the google form links for the exam will be sent to the group chat of coaches. It is expected that all coaches are attentive before the contest.

4. 5 Minutes before 9:00 AM, the coaches will send the exam link to their participants and the participants may immediately start accessing the link.

5. The participants **should** submit on or before 10:00 AM.

6. In cases of internet failure, or in cases of typhoons, unfavourable weather conditions, please inform Phil-MATH-4E at least 24 hours before the exam. **PLEASE SECURE A STABLE INTERNET ACCESS.** Failure of submission is affected by fluctuating internet connections especially when the exam link refreshes.

7. The participants are allowed to use clean sheet of papers for solving. However, they are not allowed to use calculators.

8. Please let your students secure a working email.

9. Please take note that the event is **INDIVIDUAL**, STUDENTS SHOULD ANSWER THE ITEMS INDIVIDUALLY using their WORKING EMAILS and their own gadgets (cell phone or laptop). The answers received by the Google form is the official result.

10. Please instruct participants to type correctly their NAME, NAME OF SCHOOL, NAME OF COACH, SCHOOLS DIVISION. Please do not let them write MR. MS. OR MRS. Before any name. **ALL PROFILE ENTRIES TO BE WRITTEN IN THE GOOGLE FORM SHOULD BE CAPITALIZED.**

11. Any unfortunate event on the part of the participants worthy of consideration shall be reserved to the best judgement of Phil-MATH-4E.

12. Any negation to the official result requires a petition letter and a non-refundable amount of ten thousand pesos {Php 10, 000.00} for whatever defamatory or libellous effect it may cause to the petitioned party and to the organizers. Petitions shall be void after 2 days upon posting the official result.

**After the Contest:**

1. Phil-MATH-4E will process the result in 1 week. The official result will be posted May 9-12, 2024.

2. The medals will be processed within 1 week after the official result is posted. It may take 3-4 weeks after the event before you can receive the medals.

3. The e-certificates for coaches and medallists will be posted in Google drive or will be sent to the messenger of the coaches. The template for distinction, merit and including the template for non-awardees will be sent to the coaches.