Republic of the Philippines
Department of Education
NATIONAL CAPITAL REGION

DEPARTMENT OF EDUCATION
RELEASED
RECORDS SECTION REGIONAL OFFICE-NCR
JAN 20 2025
BY: DATE:

REGIONAL MEMORANDUM
ORD-2025- 049

TO : **SCHOOLS DIVISION SUPERINTENDENTS**

FROM : **JOCELYN DR ANDAYA**
Regional Director, NCR
Concurrent Officer-in-Charge, Office of the
Assistant Secretary for Operations

SUBJECT : **UNLEASHING BRILLIANCE IN MATHEMATICS THROUGH ART AND CREATIVITY**

DATE : **JANUARY 13, 2025**

1. The Department of Education – National Capital Region (DepED-NCR), in partnership with SPRIX Ltd. and CASIO Philippines Inc., will be conducting a series of Mathematics activities under the theme "Mathematics, Art, and Creativity."

2. The objective of the activity is to engage participants in a series of fun and interactive events, including quiz bee and other creative activities, aimed at ***improving the foundational skills of learners*** in mathematics.

3. The activities will highlight the connection between mathematics, art, and creativity, fostering creative thinking while enhancing mathematical proficiency. Through these engaging experiences, participants will strengthen their problem-solving skills, promote teamwork, and demonstrate the practical applications of mathematics in artistic expression, ultimately contributing to the overall improvement of learners' mathematical foundations.

4. All expenses related to the conduct of activities at the Division, Regional, and School levels, including but not limited to event materials, venue arrangements, and other logistical requirements, will be fully sponsored by SPRIX Ltd. and CASIO Philippines. This sponsorship covers all necessary costs to ensure the successful execution of the planned activities and provides financial support for the various resources and services required throughout the event. Transportation expenses of the participants, however, shall be charged to local funds, subject to the usual accounting and auditing procedures.

5. Attached are the mechanics and schedule for the various mathematics events, outlining the structure, guidelines, and timelines for each activity. These documents

provide comprehensive information on the flow of the events, participation requirements, and other essential details to ensure the smooth conduct of the activities.

6. In cases where the activities fall on weekends or holidays, the following provisions shall apply:

Service Credit: Teacher-participants, who are required to attend the activities on weekends or holidays will be entitled to service credit in accordance with existing Department of Education (DepEd) policies. The service credit shall be granted for the number of hours worked beyond the regular working hours.

Compensatory Time-Off (CTO): In lieu of service credit, Education Program Supervisors, School Heads, Head Teachers, and other officials involved in the activity may also opt for compensatory time-off. This time-off shall be provided within a reasonable period, as determined by the Department, and in accordance with DepEd guidelines, ensuring that it does not disrupt the normal operations of the school or division.

7. Immediate and wide dissemination of this memorandum is desired.

RIR/CLMD

SCHEDULE OF ACTIVITIES

2025 SPRIX-NCR MATH CHALLENGE

ACTIVITY	DATE	TIME	VENUE
Elimination Round	February 8, 2025	8:00 A.M. to 12:00 P.M.	TBA
Cluster Team Oral	February 22, 2025	8:00 A.M. to 12:00 P.M.	TBA
Regional Finals: Individual Written Competition	March 1, 2025	8:00 A.M. to 12:00 P.M.	TBA
Regional Finals: Team Oral Competition	March 14, 2025	8:00 A.M. to 12:00 P.M.	TBA

2025 CASIO – DEPED MATH CHALLENGE

ACTIVITY	DATE	TIME	VENUE
Written Competition	March 15, 2025	8:00 A.M. to 12:00 P.M.	TBA
DaMath	March 15, 2025	1:00 P.M. to 5:00 P.M.	TBA

2025 SPRIX-NCR MATH CHALLENGE

Contest Mechanics

ELIMINATION ROUND (WRITTEN): February 8, 2024

1. The Elimination Round will be held simultaneously across all divisions in the region on February 8, 2025, at 8:00 AM. Each school should send three (3) participants per level. The contest must be conducted on this scheduled date only.

Grade Levels and Time Allotments

   a. Grades 1 & 2: 30 items, 60 minutes
   b. Grades 3 & 4: 40 items, 80 minutes
   c. Grades 5 & 6: 50 items, 90 minutes
   d. Grades 7-10: 50 items, 120 minutes

2. In each division, contestants will be grouped into two categories: SPRIX-NCR-A (Regular) and SPRIX-NCR-B (Science-Private Categories). The top 3 scorers per level in each division will automatically qualify for the Regional Individual Finals. Additionally, the top two(2) teams per level in each division will qualify for the Cluster Team Finals.

3. Winners of the elimination round should be announced immediately once the test papers are corrected.

4. Awards

Rank	For Contestant	For Coach
Top Scorer	Medal and Certificate	Certificate
2nd Placer	Medal and Certificate	Certificate
3rd Placer	Medal and Certificate	Certificate
Participation	Certificate	Certificate

CLUSTER TEAM ORAL: February 22, 2024

CaMaNaVa Cluster	PaMaMariSan Cluster	MunTaParLas Cluster	PaMaMaZon Cluster
SDO Caloocan	SDO Pasig	SDO Muntinlupa	SDO Pasay
SDO Malabon	SDO Mandaluyong	SDO TaPat	SDO Manila
SDO Navotas	SDO Marikina	SDO Parañaque	SDO Makati
SDO Valenzuela	SDO San Juan	SDO Las Piñas	SDO Quezon City

1. The competition will take place simultaneously, preferably on a stage, inside a gym, or in any function room that can accommodate both participants and the audience.
2. The top two (2) teams per level in the Cluster Team Finals will qualify for the Regional Finals.
3. The competition should be held simultaneously in all clusters.
4. Awards

Rank	Contestant	Coach
1st Placer	Trophy, Medal and Certificate	Certificate
2nd Placer	Trophy, Medal and Certificate	Certificate
3rd Placer	Trophy, Medal and Certificate	Certificate
Participation	Certificate	Certificate

Regional Finals

Individual Written Competition: March 1, 2025

The competition will be conducted in a closed room. Contestants must use their code numbers provided during registration.

Award and Recognition

Rank	For Contestant	For Coach
Top Scorer	Medal, Certificate, and Cash prize	Certificate
2nd Placer	Medal, Certificate, and Cash	Certificate
3rd Placer	Medal, Certificate, and Cash prize	Certificate
Participation	Certificate	Certificate

The top three scorers will receive cash prizes, certificates, and medals. A Certificate of Recognition will be awarded to each trainer or coach, and each non-winning Regional Finalist will receive a Certificate of Merit.

Team Oral Competition: March 14, 2025

The mechanics for the Regional Team Oral Competition will be the same as those for the Cluster Team Oral Finals.

Award and Recognition

Rank	For Contestant	For Coach
1st Placer	Trophy, Medal, Certificate, and Cash	Certificate
2nd Placer	Trophy, Medal, Certificate, and Cash	Certificate
3rd Placer	Trophy, Medal, Certificate, and Cash	Certificate
Participation	Certificate	Certificate

Certificates of Recognition will be given to all coaches, competition officials, and proctors. All non-winning Regional Finalists will receive Certificates of Merit.

Focal Persons:

MR. MICHAEL LEE, ESP-MAKATI
MR. LAMBERT QUESADA, EPS-MUNTINLUPA
DR. ALBERT TIANGCO, EPS-NAVOTAS
MR. ROGER JUNIO, EPS-PASAY

CASIO-DEPED NCR MATHEMATICS CHALLENGE

CONTEST MECHANICS

OVERVIEW

The CASIO-DepEd NCR Mathematics Competition is a written examination designed for students in Grades 7, 8, 9, 10, and Senior High School. This prestigious event encourages mathematical excellence among learners and promotes the use of advanced mathematical tools like the **CASIO FX-570ES PLUS-2CWDT Transparent Calculator**. Winners will receive medals and cash prizes, recognizing their skills and efforts.

ELIGIBILITY

1. Participants:

- Open to all students in Grades 7 to 12 from public and private schools within the National Capital Region.
- Each school can register a minimum of two participants per grade level.

2. Registration:

Participants must register through their respective schools.
Schools must submit the following documents for each participant:
- Accomplished registration form.
- Photocopy of the participant's school ID or proof of enrollment.
- Parent/guardian consent form.

Deadline for registration will be on January 31, 2025

3. Calculator Requirement:

- All participants must use the **CASIO FX-570ES PLUS-2CWDT Transparent Calculator** during the competition.
- Use of other calculators or devices is strictly prohibited.

COMPETITION FORMAT

1. Examination:

The competition consists of a one-round written examination.
The examination will feature 30 questions divided as follows:
- 10 questions (Easy) – 2 points each.
- 10 questions (Moderate) – 3 points each.
- 10 questions (Difficult) – 5 points each.

Total score: 100 points.

2. Coverage:

The questions will cover topics relevant to each grade level based on the DepEd K-12 Mathematics curriculum, including:

- Algebra
- Geometry
- Statistics and Probability
- Trigonometry
- Calculus (for Senior High School participants only)

3. Duration:

Participants will be given 1.5 hours to complete the written exam.

COMPETITION RULES

1. Venue:

TBA

2. Identification:

Participants must wear their school uniform and present their school ID during the event.

3. Prohibited Items:

- Use of mobile phones, smartwatches, or other electronic devices is strictly prohibited.
- Participants found using unauthorized materials or devices will be disqualified.

4. Exam Protocol:

- The use of scratch paper will be allowed; it will be provided by the organizers.
- Calculators must comply with the competition requirement (CASIO FX-570ES PLUS-2CWDT Transparent Calculator).
- Participants must stop writing once the time limit is reached; failure to comply will result in penalties.

JUDGING AND SCORING

1. Scoring System:

- Answers will be graded by a panel of math experts.
- The participant with the highest total score will be declared the winner.

2. Tiebreaker:

In case of a tie, a sudden-death round will be conducted. Participants will answer a series of tie-breaker questions until the tie is broken.

AWARDS AND PRIZES

1. Prizes:

- 1st Place: Gold Medal and Cash Prize.
- 2nd Place: Silver Medal and Cash Prize.
- 3rd Place: Bronze Medal and Cash Prize.

2. Certificates:

- Certificates of Participation will be awarded to all participants.
- Certificates of Recognition will be given to the top 10 scorers for each grade level.

IMPORTANT DATES

1. Registration Deadline: January 31, 2025
2. Competition Date: March 15, 2025 from 8:00 A.M. to 9:30 A.M.

3. Awarding Ceremony: March 15, 2025, 10:00 A.M. to 12:00 P.M.

FINAL PROVISIONS

By joining the competition, participants agree to abide by all the rules and regulations set by the organizers. Failure to comply with the rules may result in disqualification. Let this event inspire young minds to excel in mathematics and promote the innovative use of CASIO calculators in classrooms.

Event Focal Persons:

MS. REMYLINDA SORIANO, EPS – MANILA
MS. HELEN ACEDO – EPS – SAN JUAN
MS. EVELYN CALLADA, EPS – MALABON
ENGR. JENNIFER MONDOY, EPS - CALOOCAN

TABLES

First Year - INTEGER DAMATH (Position of Chips)

	-9		6		-1		4
0		-3		10		-7	
	-11		8		-5		2

Second Year - RATIONAL DAMATH (Position of Chips)

	-9/10		6/10		-1/10		4/10
0		-3/10		10/10		-7/10	
	-11/10		8/10		-5/10		2/10

Third Year - RADICAL DAMATH (Position of Chips)

	$-9\sqrt{2}$		$-\sqrt{8}$		$4\sqrt{18}$		$16\sqrt{32}$
$-49\sqrt{8}$		$-25\sqrt{18}$		$36\sqrt{32}$		$64\sqrt{2}$	
	$-121\sqrt{18}$		$-81\sqrt{32}$		$100\sqrt{2}$		$144\sqrt{8}$

Fourth Year - POLYNOMIAL DAMATH (Position of Chips)

	$-3x^2y$		$-xy^2$		$6x$		$10y$
$-21xy^2$		$-15x$		$28y$		$36x^2y$	
	$-55x$		$-45y$		$66x^2y$		$78xy^2$

Teacher Category - BINARY DAMATH (Position of Chips)

	0		1		0		1
1		0		1		0	
	0		1		0		1

DAMATH BOARD

	7	6	5	4	3	2	1	0	
7	X		÷		-		+		0
6		÷		X		+		-	1
5	-		+		X		÷		2
4		+		-		÷		X	3
3	X		÷		-		+		4
2		÷		X		+		-	5
1	-		+		X		÷		6
0		+		-		÷		X	7
	0	1	2	3	4	5	6	7	

TABLES

First Year - INTEGER DAMATH (Position of Chips)

	-9		6		-1		4
0		-3		10		-7	
	-11		8		-5		2

Second Year - RATIONAL DAMATH (Position of Chips)

	-9/10		6/10		-1/10		4/10
0		-3/10		10/10		-7/10	
	-11/10		8/10		-5/10		2/10

Third Year - RADICAL DAMATH (Position of Chips)

	$-9\sqrt{2}$		$-\sqrt{8}$		$4\sqrt{18}$		$16\sqrt{32}$
$-49\sqrt{8}$		$-25\sqrt{18}$		$36\sqrt{32}$		$64\sqrt{2}$	
	$-121\sqrt{18}$		$-81\sqrt{32}$		$100\sqrt{2}$		$144\sqrt{8}$

Fourth Year - POLYNOMIAL DAMATH (Position of Chips)

	$-3x^2y$		$-xy^2$		$6x$		$10y$
$-21xy^2$		$-15x$		$28y$		$36x^2y$	
	$-55x$		$-45y$		$66x^2y$		$78xy^2$

Teacher Category - BINARY DAMATH (Position of Chips)

	0		1		0		1
1		0		1		0	
	0		1		0		1

DAMATH BOARD

	7	6	5	4	3	2	1	0	
7	X		÷		-		+		0
6		÷		X		+		-	1
5	-		+		X		÷		2
4		+		-		÷		X	3
3	X		÷		-		+		4
2		÷		X		+		-	5
1	-		+		X		÷		6
0		+		-		÷		X	7
	0	1	2	3	4	5	6	7	

(Inclosure B to DECS Memorandum No. 361 s. 1999)

DAMATH RULES

Basically the rules in playing the Filipino checker board game called ***dama*** will be used with some modifications in integrating Matheamtics as follows:

1. Set the starting positions of the chips. (See the tables.)
2. After the starting positions of the chips have been set, the first player is determined by drawing lots.
3. A chip is allowed to move diagonally forward only to an adjoining vacant square.
4. A chip has to take the opponent's chip diagonally forward or backward, thus, ***"pass"*** is not allowed. Mathematical operations (+, -, x, ÷) will be used depending on the vacant squares operation symbol where the ***"taker"*** chips land by jumping over the ***"taken"*** chip (the latter chip has to be removed from the board after performing the indicated mathematical operation and recording the same in the score sheet.)
5. In taking more than one chip, the ***"taker"*** chip is always the addend, minuend, multiplicand, or dividend as the case may be.
6. In taking a chip or more than one chip, the dama rules on **"dama", "mayor dama", "mayor dalawa or tatlo", "mayor tatlo over dalawa", "mayor dalawa or tatlo over dama"** prevail.
7. A chip is declared ***"dama"*** upon reaching terminally on any of the four (4) squares of the first row of his opponent.
8. A ***"dama"*** chip is allowed to take a chip or more than one chip, or move to any unoccupied square along its diagonal path. Moreover, ***dama's*** score is doubled in taking a chip or chips, and quadrupled if it takes the opponent's ***dama*** chip.
9. A ***"move"*** (e.g. 2 => (6,3) is good only at the most for one (1) minute including its corresponding entries in the score sheet, while, the game's duration is twenty (20) minutes. (A player may lose his game for delaying the game twice.)
10. The game may end when any of the following situations occur:
    - ♦ If no show of one player is declared after ten (10) minutes
    - ♦ Repetitive moves of any or both players
    - ♦ A player resigns
    - ♦ A player's chip is cornered
    - ♦ A player has no more chip to move
    - ♦ The 20-minute game duration ended
11. The ramaining chips have to be added to the respective player's total score.
12. The player with the greater total score is declared winner for which he is entitled to one (1) point in the tally sheet of contestant or 0.5 or 1/2 point in case of draw.
13. Only one score sheet is allowed to be accomplished alternately by the two players, whereby, incorrect entries shall be their responsibility. In case of the incorrect entries in the score sheet, a player has to immediately call the attention of the competition facilitator (arbiter) by raising one's hand, that is, after stopping time. As determined by the said arbiter, the appropriate corrections will be done by the erring player in as much as the former's decision is final and unappealable.
14. Warning shall be imposed by the arbiter for the first and second offense for the incorrect entries of moves and scores. However, for the third offense his opponent will be declared winner.
15. The game implements TOUCH MOVE policy.
16. Only the contestant has the right to raise protest during the game or before signing the score sheet.
17. Only one (1) score sheet should be used by the players in one game and ***affix*** the signature below after declaring the winner / loser.
18. The players will compute their own score and recheck by his opponent.
19. In case of tie, both players will gain 1/2 win.

This DAMATH RULES can be downloaded from **www.mathqc.multiply.com.** Click blog, click Damath Rules.

FOCAL PERSONS:

DR. JOEL FELICIANO, EPS-QUEZON CITY

MS. GINA AGUITEZ, EPS-LAS PINAS