

DIVISION MATHEMATICS FESTIVAL OF TALENTS (PROJECT BESTMATH)

- To: All Heads of Public Elementary, Secondary and Integrated Schools Education Program Supervisors Public Schools District Supervisors All Mathematics District Coordinators
- 1. This is to announce the conduct of DIVISION MATHEMATICS FESTIVAL OF TALENTS (Project BeSTMath) which will be held on November 8, 2019 at the Clemente N. Dayrit Elementary School.
- 2. The festival aims to :
 - a. provide students the opportunity to hasten their problem solving skills on the different contents in mathematics;
 - develop teachers creativity in constructing improvised teaching and learning materials;
 - c. develop critical, analytical thinking;
 - d. produce mathematically inclined students who will represent the division in any Mathematics competition here and abroad; and
 - e. instill the values of camaraderie, teamwork, creativity and love.
- 3. The competition shall showcase eight (8) categories namely Math Quiz, Sudoku, Math Trail, Rubik's Cube for students, Best Math Laboratory, Best Math Garden, Best Mathematical Investigation, and SIM for teachers.
- 4. The participants are the School Based Mathematics competition winners and coaches.
- 5. All expenses such as meals, transportation, costumes, props, instruments, materials and others related to the contests starting with the school level, division level up to the regional level will be charged against the schools' local funds subject to usual accounting and auditing rules.

"SMILES BRIGHT, SERVES RIGHT"



Department of Education Region III DIVISION OF CITY SCHOOLS Angeles City Jesus Street, Pulungbulu, Angeles City

DIVISION MEMORANDUM



Document Code: SDO-QF-OSDS-SDS-003

Revision: 00

Effectivity date: 10/31/2018

Name of Office:

- 6. A contribution of forty pesos (P 40.00) will be collected from each participant chargeable against the canteen/local funds to defray expenses during division level competitions, such as trophies, medals, certificates, materials, tokens and meals for the judges.
- 7. A meeting of all Math District Coordinators with the Math Supervisor will be held on October 15, 2019, 2 P.M. at the Library Hub. Namely:

Normita B. Pineda -North District Trimie S. Lacsina - East District Aileen A. Narciso -West District Arceli L. Sabandal- South District Jeferson D. Karagdag-Junior High School Josel L. Dizon- Senior High School

- 8. Attached are the mechanics of the said activities.
- 9. Wide dissemination of this division Memorandum is earnestly desired.

UNANAN, CESO V Schools Division Superintendent

Math Contest	Mathematics Quiz
Grade Level	Elementary, Junior High School and Senior High School
No. of Participants	One pupil for every grade level (Grades 1,2,3,4, 5, and 6) for Elementary, one student for every grade level (Grades 7, 8, 9, and 10) for Junior High School and one student for every grade level(11 and 12)
Time Allotment	One (1) hour

I. Contest Rules and Mechanics

- 1. All contestants should be at the designated venue at least fifteen (15) minutes before the contest starts. Late contestants without valid reasons shall be disqualified.
- 2. All Mathematics contests will start simultaneously, thus a contestant participating in more than one contest is prohibited.
- 3. The written examination shall consist of twenty (20) items.
- 4. The proctors shall distribute first the scratch papers where the contestants shall solve the problems. Contestants should write their names in all the scratch papers.
- 5. Test papers will be distributed (facedown) to each contestant one at a time, to be answered within a given period as determined by the judge. Reading and answering of the questions will be done as soon as the signal is given.
- 6. The judge tells the contestants that only the final answers must be written on the test paper. All solutions shall be placed on the scratch papers which should also be turned over to the proctors together with the test paper.
- 7. Contestants are not allowed to bring cellphone, iPad, iPod, camera, calculator, laptop computer, and other gadgets inside the testing room.
- 8. If any student submits the paper before the time, the judge shall accept it and ask the contestant to leave the classroom. The judge shall collect all papers when the time is up and will not allow any extension.
- 9. The papers shall be corrected using the answer keys provided. Answer keys shall only be opened just before correction begins. Each correct answer merits one point.
- 10. The first, second, and third place winners will be determined by ranking each contestant's score. In case of ties for these places, tie-breaking questions will be administered by the judge.
- 11. In any event that a situation arises, which is not covered by these rules or mechanics, it will be referred to the members of Contest Committee for their judgment and pronouncement. The decision of the Contest Committee is final and unappealable.

- 1. Written Examination for all Grade Levels (Grades 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12)
- 2. Tie-break Questions for all Grade Levels (Grades1,2,3 4, 5, 6, 7, 8, 9, 10,11, and 12)
- 3. Tabulation Sheets

Math Contest	Sudoku Super Challenge
Grade Level	Elementary and Junior High School
No. of Participants	One pupil for Elementary and one student for Junior High School
Time Allotment	One and a half (1 1/2) hours

I. Contest Rules and Mechanics

- 1. All contestants should be at the designated venue at least fifteen (15) minutes before the contest starts. Late contestants without valid reasons shall be disqualified.
- 2. All Mathematics contests will start simultaneously, thus a contestant participating in more than one contest is prohibited.
- 3. The Sudoku Super Challenge contest is composed of three (3) rounds. The participants are given 30 minutes each round to answer two (2) puzzles. There will be no elimination of contestants in any of the given rounds.
- The puzzles will come in the following variants: Classic/Standard, Diagonal, Consecutive, Wordoku, Odd-Even, and Killer Sudoku.
- 5. Contestants are not allowed to bring cellphone, iPad, iPod, camera, calculator, laptop computer, and other gadgets inside the contest room.
- Sudoku Puzzles will be distributed (facedown) to each contestant one at a time, to be answered within a given period as determined by the judge.
- 7. The points per puzzle is 10 points for Round 1, 15 points for Round 2, and 20 points for Round 3.
- 8. Bonus points shall be computed and considered at the end of every round. Any contestant who finished answering correctly all the puzzles for a given round before the allotted time will get the corresponding bonus points.
- The puzzles shall be corrected using the answer keys provided. Answer keys shall only be opened just before correction begins.
- 10. Puzzle with one spot-error (1 cell) will have a deduction of 4 points on the score of the given puzzle while a puzzle with two spot-errors (2 cells) will have a deduction of 9 points on the score of the given puzzle.
- 11. In determining the top scorers, the sum of the scores in every round of each contestant shall be added.
- 12. The first, second, and third place winners will be determined by ranking each contestant's score.
- 13. In case of a tie, the checkers will Spot-Check (i.e. check every cell containing the correct value) the puzzles in Round 3. Only incomplete puzzles will undergo this procedure. The winner will be the contestant with the most number of correct values after the spot-check. The spot-check procedure will be repeated to rounds 2 and 1 as needed.
- 14. In any event that a situation arises, which is not covered by these rules or mechanics, it will be referred to the members of Contest Committee for their judgment and pronouncement. The decision of the Contest Committee is final and unappealable.

- 1. Sudoku Puzzles for both Elementary and Junior High School Level
- 2. Tabulation Sheets

Math Contest	Rubik's Cube Challenge	
Grade Level	Elementary and Junior High School	
No. of Participants	One pupil for Elementary and one student for Junior High School	
Time Allotment	Two (2) hours	

I. Contest Rules and Mechanics

- All contestants should be at the designated venue at least fifteen (15) minutes before the contest starts.
 Late contestants without valid reasons shall be disqualified.
- 2. All Mathematics contests will start simultaneously, thus a contestant participating in more than one contest is prohibited.
- 3. The Rubik's Cube Challenge is composed of three (3) rounds. There will be no elimination of contestants in any of the given rounds.
- 4. A contestant is allotted a maximum of 15 seconds, per round, to inspect the puzzle.
- For Round 1, the contestants will solve one (1) Rubik's Cube puzzle scrambled by the facilitators.
- The time starts immediately after the judge announces the "GO" signal. The time stops when the contestant had completely solved the puzzle and had stopped their respective timers. A facilitator will be assigned to monitor each contestant's speed in solving the Rubik's Cube puzzle.
- 7. If a puzzle defect occurs during an attempt, the contestant may choose to either repair the defect and continue the attempt, or to stop the attempt. However, the contestant is no longer allowed to continue if he/she happened to place down the Rubik's cube before the puzzle was solved.
- 8. A puzzle is said to be in the solved state when all the parts of the puzzle was solved. puzzle and fully placed in their required positions with all colored parts reassembled and all parts are aligned.
- If the puzzle is unsolvable, and can be made solvable by rotating a single corner piece, the contestant may correct the corner piece by twisting it in place without disassembling the puzzle.
- 10. The time of each contestant will be recorded and ranked based on the time consumed in solving the puzzle for every round. Contestants who were disqualified in a given round will receive the lowest possible rank for that round.
- 11. In Round 2, the contestants will solve two (2) Rubik's Cube. In this round, the qualifiers will be given the chance to rearrange the cubes of their competitors (i.e. Rank 1 contestant will scramble the Rubik's cubes to be solved by the Rank 2 contestant and vice versa, Rank 3 contestant will scramble the Rubik's cubes to be solved by Rank 4 contestant and vice versa, and so on). Each contestant is allowed a maximum of 15 seconds per cube to scramble their competitor's cubes.
- 12. In Round 3, the contestants will solve three (3) Rubik's Cube. Scrambling of the Rubik's Cubes will follow the same procedure as that of Round 2.
- 13. At the end of three rounds, the composite rank will be computed to determine the winner of the contest.
- 14. In case of a tie in the composite rank, the total time consumed by the contestants in the three rounds will be basis in the determination of the winner of the contest. The fastest Rubik's Cube solver will prevail.
- 15. In any event that a situation arises, which is not covered by these rules or mechanics, it will be referred to the members of Contest Committee for their judgment and pronouncement. The decision of the Contest Committee is final and unappealable.

II. Resource Requirement

1. Tabulation Sheets

Math Contest	Math Trail Competition
Grade Level	Junior High School
No. of Participants	One Team (one student each for Grades 7, 8, 9, and 10) for Junior High School
Time Allotment	Three (3) hours

I. Contest Rules and Mechanics

- All contestants should be at the designated venue at least fifteen (15) minutes before the contest starts. Late contestants without valid reasons shall be disqualified.
- 2. All Mathematics contests will start simultaneously, thus a contestant participating in more than one contest is prohibited.
- All four members of the team must come from the same junior high school or integrated school.
- The competition is composed of five (5) stations containing different data or important information needed to answer a particular problem. Every team must get whatever information that each station may provide or suggest.
- Calculators are allowed during the competition. Bringing and/or using of cellphone, iPad, iPod, camera, calculator, laptop computer, and other gadgets is not allowed during the competition. Each team is required to bring measuring devices.
- Coaches or teachers are not allowed to enter the contest area and/or stations so as not to disrupt the conduct of the contest.
- 7. Each team is allowed to stay in every station for only three (3) minutes to gather the data and other pertinent information. The designated proctor will announce the starting and ending time for the team to be in a particular station. Staying in a station for more than the allowed time will mean points against the overstaying team.
- 8. Every team must read the instructions carefully about what ought to be done in every station. After gathering all the available or needed information from the five stations, the team must proceed to the problem solving area (Math Cave) and get the contest problems and answer sheets from the judge. Look for an available space in this problem solving area and solve the problems using the information gathered.
- 9. There should be no more than three (3) teams allowed to be in one station and there should be no two (2) teams to crowd in one set of contest material to gather information. In the event that a team has finished gathering information before the allotted time, then it can go to another station right away.
- 10. No member of the team is allowed to mark, erase, deface, tear, crease, add or alter any figures, arrangements, lines, positions of any materials placed for the purpose of measurement. Any member of the team who is caught violating this rule would mean disqualification of the whole team.
- 11. The first, second, and third place winners will be determined by ranking each team's score. In case of ties for these places, the total time consumed by the team will be the basis in the determination of the winner of the contest.
- 12. In any event that a situation arises, which is not covered by these rules or mechanics, it will be referred to the members of Contest Committee for their judgment and pronouncement. The decision of the Contest Committee is final and unappealable.

- 1. Materials for the five (5) stations
- 2. Test Material for the five (5) stations and Math Cave
- 3. Tabulation Sheets

Math Contest	Strategic Intervention Materials for Teachers
Grade Level	Elementary and Junior High School
No. of Participants	One Elementary teacher and one Junior High School teacher
Time Allotment	Four (4) hours

I. Contest Rules and Mechanics

- 1. All contestants should be at the designated venue at least fifteen (15) minutes before the contest starts. Late contestants without valid reasons shall be disqualified.
- The teacher-contestant will present his/her strategic intervention material (SIM) which is a booklettype learning resource with dimensions of 8.27 inches by 11.69 inches (A4 size) either in portrait or landscape orientation.
- 3. The strategic intervention material (SIM) must contain all the necessary parts of this learning resource. It may feature some pop-up images or pull-out activities for the learners to manipulate.
- 4. The teacher-contestant is only given eight (8) minutes to resent his/her SIM. This time allotment may be subdivided in a 5-minute presentation 3-minute question and answer scheme. The teacher-participant may choose a different scheme (e.g. 1-minute presentation 7-minute Q&A or 8-minute presentation with no provisions for Q&A) which will suit his/her style of presentation.
- 5. Each judge will rank the teacher-contestants based on the scores from the Strategic Intervention Materials Scoring Tool.
- 6. After all the presentations, the composite rank will be computed to determine the winner of the contest.
- 7. In case of a tie in the composite rank, the judges will re-appreciate the strategic intervention materials with tied composite ranks. This will determine the final winner of the contest.
- 8. In any event that a situation arises, which is not covered by these rules or mechanics, it will be referred to the members of Contest Committee for their judgment and pronouncement. The decision of the Contest Committee is final and unappealable.

- 1. Strategic Intervention Materials Scoring Tool
- 2. Tabulation Sheets

Strategic Intervention Materials (SIM)

DIRECTION: Rate the materials 1-5 in the blanks provided, with 5 as the highest score5 - Outstanding4 - Very Satisfactory3 - Satisfactory2 - Less Satisfactory1 - Unsatisfactory

CONTENT

- Aligns with curriculum and standards, and is current, valid and reliable, with real-world examples
- Is age-appropriate and is designed to meet the needs of individual learners from various skills levels
- Is in-depth and enhances conceptual understanding and engages higher order of thinking skills
- _____ Is free from bias

EQUITY AND ACCESSIBILITY

- _____ Materials are durable, easily stored, transported and are universally accessible
- Materials are easily updated and are adaptable and customizable to match the resources of the school
- _____ Materials work properly without purchase of additional components
- Materials can be used by all students without extensive supervision or special assistance

ASSESSMENT

- _____ There is an observable performance that is relevant to real world experience and that can be used to measure student engagement
- Assessment methods are appropriate and suited to the learning objectives
- Assessment is suited to goals and student ability and easily assesses what has been learned
- The materials keep an on-going record of students' progress and allows the teacher full-access to individual student monitoring of activities

ORGANIZATION AND PRESENTATION

- _____ Content and directions are clear and understandable and distinguish between important and trivial information
- _____ Materials are easy to navigate through
- _____ There are provisions for the practice of old and new skills, and for students to enter and exit materials easily
- _____Materials are interactive and provide high quality sensory experiences for all users

INSTRUCTIONAL DESIGN AND SUPPORT

- _____ The delivery method is used appropriately and successfully engages the student
- _____ Technical procedures, such as installation and setup are easy and error-free
- Technical specifications and limitations are adequately described and noted
- Assistance is readily available at any point in the website and many supplemental resources are available

TOTAL SCORE