

INSTRUCTIONS FOR THE CONTESTANT

• **ENTRIES.** As many as THREE students from EACH GRADE LEVEL (4, 5, 6, 7 and 8) OR ages 9, 10, 11, 12 and 13 by Sept. 1 of the current school year, if in an ungraded school, may be entered in the MATHEMATICS District Contest from each school. Designated adults representing each school will select contestants to represent the campus at the District Meet based on their abilities in mathematics, and other factors, which are decided upon by each school. Each grade level is judged separately in contest.

• **ADVANCING TO STATE.** 4 students from a grade level must compete in order to advance 2 students from that grade to State (See page 8 for complete rules.)

• **NATURE OF THE CONTEST.** The Mathematics contest tests the contestant's ability to solve a variety of mathematical problems studied at and above grade level. No loose papers or other materials are allowed. Calculators are NOT permitted for use in the contest. The test for grades 4 and 5 consists of 40 problems. The test for grades 6-8 consists of 50 problems. Test questions are similar to those found in state-adopted textbooks, but many items are usually tested at a higher grade level. For the grades 6-8 contest, approximately 25% of the problems will require knowledge of Algebra I computation skills. All tests will contain problems covering, but not limited to, numeration systems, arithmetic operations involving whole numbers, integers, fractions, decimals, exponents, order of operations, probability, statistics, number theory, simple interest, measurements (English and metric), and conversions normally covered (feet to inches, quarts to gallons, etc.). There will also be geometry problems normally covered in the middle school student's textbooks, including application of the Pythagorean theorem. Normal geometry problems will include finding area and volume of polygons/polyhedra and circles/spheres. Various types of problems are randomly distributed throughout the test. **All contest materials, other than the test itself, must be supplied by the contestant.**

• **WHAT HAPPENS IN THE CONTEST.** The contest director will announce the time and place that contestants and one adult should report for verification of the scoring of tests. Tests and answer sheets will be distributed to contestants face up, and **contestants will be instructed to write their grade levels, school numbers, and contestant ID numbers in the spaces provided on the front cover of the test and their contestant ID number and grade level only on the answer sheet.** Contestants must not open the test until the start signal is given. The contest director will tell contestants their ID numbers, usually during roll call. (Alternates taking the place of absent registered contestants should be sure to let the contest director know as they enter the room to save time in roll call.) No

alarm watches or other devices that emit sound are allowed in the contest room. Contestants may use any white spaces on the test to assist in computing answers. No additional paper will be provided. All contest materials, other than the test itself, must be supplied by the contestant.

TIME ALLOTTED. When the start signal is given, contestants will have 30 minutes to answer test questions. Contestants will remain quietly in their seats until the time has expired.

MARKING ANSWERS. Contestants may write on the test paper, but only the **PRINTED CAPITAL** letter answer should be written in the answer space on the answer sheet. Any marking in the answer space will constitute an attempt. Contestants may place an X in the box provided where an erasure, mark-out, or undesired answer has occurred in order to not have points deducted for these errors. (See page 12 for Skipping X-box examples.)

• **SCORING.** Add 5 points for each correct answer. Subtract 2 points for each incorrect answer, or for each answer that was attempted, marked through or erased, and did not result in a correct answer. **No points** are added or deducted for skipped or unanswered test items, or erased, marked-out, or answered items when an X is placed in the box beside the answer blank.

• **VERIFICATION PERIOD.** No pens, pencils, papers, cell phones, or any other items should be in contestants' area while tests and answer sheets with keys are reviewed **QUIETLY.** Contestants and ONE coach OR parent OR adult have 15 minutes to check the computation of scores and ask questions about items counted incorrect. If the contest is held before **April 2**, tests must be turned back in to the contest director. Contestants will be disqualified from the contest should the paper be taken from the room prior to this date. After verification has been completed, awards will be issued. (See page 13 for complete rules for Verification Period.)

• **MATERIALS.** Last year's PSIA Mathematics tests and answer keys, plus tests from previous PSIA contests, are included in the PSIA Academic Study Materials Booklets, which may be ordered from the PSIA office. A PSIA Study Materials Order Forms for these booklets are included in the appendix of this handbook.

Sample Level 4/5 Mathematics Problems

- $2 + 8 + 4 + 6 + 3 + 7 =$
A) 18 B) 40 C) 30 D) 28 E) none of these
- Elizabeth has eighteen marbles. She gives three marbles to Matthew and nine marbles to Daniel. How many marbles does Elizabeth have left?
A) 5 B) 4 C) 12 D) 6 E) none of these
- Olivia wanted to save up enough money to buy her mother a birthday gift that cost \$6.50 including tax. If Olivia can save 25 cents every week, how many weeks would it take her to save the price of the present?
A) 18 weeks B) 24 weeks C) 30 weeks D) 26 weeks

