INSTRUCTIONS FOR THE CONTESTANT

ENTRIES. As many as THREE students from each grade level (grades 6, 7 and 8) OR ages 11, 12 and 13 respectively by Sept. 1 of the current school year, if in an ungraded school, may be entered in the Calculator Applications District contest from each school. **Grade levels MAY be judged separately at District, but only the top 2 scoring students in combined grades 6 through 8 will advance to State.**

• **ADVANCING TO STATE.** A minimum of four students from at least two different schools must compete at the district meet in order for the top **two** students from the combined grade levels to advance to State. (See page 8 for complete rules for advancing to State.)

• **NATURE OF THE CONTEST.** The contest presents 80 problems in straight-forward numerical calculation, in calculations based upon geometrically presented problems, and in word problems. Both accuracy and speed are factors in the competition. **ONLY one** silent, hand-held, tapeless calculator may be used and should be brought to contest. Geometric problems involve knowledge of formulas for simple figures such as circles, squares, rectangles, and right triangles. Word problems require application of appropriate mathematical skills and practical knowlege to real-life situations.

• **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. Contestants will be assisted by the director and assistant(s) in clearing all calculator memories and turning calculators to the "off" position. The contest director will tell contestants their ID numbers, usually during roll call. Tests will be distributed to contestants face up, and contestants will be instructed to write their grade levels and their contestant ID numbers in the spaces provided on the front cover. Contestant must not open the test until the start signal is given. (Substitutes taking the place of absent registered contestants should 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.

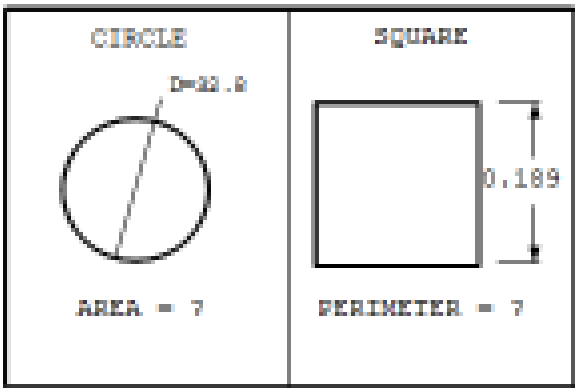
• SAMPLE PROBLEMS. Representative problems of medium difficulty are provided below:

6.95 + 9.58 - 8.6 + 89.6

[7.55 - (0.154) / (0.247)] + [(5.35)(0.382) - (0.525)]

Bob decides to treat his 26 co-workers by giving them 4 mini-candy bars each. How many mini-candy bars will Bob need? _____ integer

Zooey rides her bike 200 meters due north, then rides twice as far to the east, and finally rides straight back to her starting point. If she rides at the speed of 42 meters per minute, how long does her round-trip take?
_____ minutes



TIME ALOTTED. Contestants will have 30 minutes beginning at the start signal. No time warning will be given. Contestants will remain quietly in their seats until the time has expired.

MARKING ANSWERS. Contestants may write on the test paper, but only the answer should be written in the answer space. Any marking or erasure in the answer space will constitute an attempt. Answers may be written in decimal or in powers of 10 notation of the form, 1.23 x 10^{-6}. Except in the integer and dollar sign problems, answers should be written with three significant digits only, with plus or minus one digit error in the third significant digit permitted. Integer problems require answers written as an integer, and no error is permitted. Dollar sign problems should be answered to the exact cent, but plus or minus one cent error is permitted. Answers should be given in the units specified on the answer blank, if a unit is required, and with the correct sign. All test questions up through the last one attempted, including an erased attempt, will be scored.

• **SCORING.** Add 5 points for each correct answer. Subtract 2 points for each wrong answer, every skipped test question, and for each answer that was marked through or erased, without resulting in a correct answer.

• **VERIFICATION PERIOD.** 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 March 31, tests must be turned back in to the contest director. (See page 13 for full Verification rules.)

• **MATERIALS.**

Last year's PSIA Calculator Applications tests and answer keys, plus tests from previous PSIA contests, are available on Study Materials Order Form and Tests Order Form found in the appendix of the handbook and on the PSIA website.

A Commonly Asked Question

Q. If the answer to a question is 3.68 x 10^1, would the answer be correct if it were given as 3.68 x 10 with the (^{1}) omitted?

A. 3.68 x 10^1, 3.68 x 10 and 36.8 are correct answers. 3.68E1, 3.68 • 10^1 and 36.8 x 10^0 are incorrect.

See Scoring Instructions on the following pages.