Testing Rules of the CAAA Annual Abacus & Mental Arithmetic Assessment Test and the Oral Dictation and Math Competitions

Northern California Testing Region

1. **Objective:** This event aims to promote the Chinese cultural tradition of Abacus and Mental Arithmetic in relation to enhance students' focus and response capabilities; to develop their full potential; and to improve their computation and application skills.
2. **Qualification:** Students who have attended abacus and mental math classes.
3. **Time:** July 26, 2020.
4. **Categories:** Abacus and Mental Arithmetic
5. **Levels:** Abacus and Mental Arithmetic Tests: a) Advanced Levels: 1 to 10-Elite; b) Grade Levels: 1 to 10
6. **Awards:** Certificates are awarded to those who pass the exams. In addition, trophies are awarded to those who pass Grade One and Advanced Level. Student who qualify for Advanced 10 or Advanced 10-Elite will be awarded Scholarship.
7. **Assessment Tests and Standards:** See Appendices A and B.

Appendix A (Mental Arithmetic):

Level	Category	Test Question Standard	# of Questions	Time Limit
Advanced Level	Multiplication	60 questions of 5-digit whole numbers (3 digits x 2 digits, 2 digits x 3 digits), 40 questions of 6-digit whole numbers (3 digits x 3 digits, 2 digits x 4 digits, 4 digits x 2 digits), 20 questions of 7-digit whole numbers (3 digits x 4 digits, 4 digits x 3 digits, 3 digits x 5 digits, 4 digits x 4 digits)	120	5 minutes
	Division	60 questions of 5-digit whole numbers (5 digits / 2 digits, 5 digits / 3 digits), 40 questions of 6-digit whole numbers (6 digits / 2 digits, 6 digits / 3 digits, 6 digits /4 digits), 20 questions of 7-digit whole numbers (7 digits / 3 digits, 7 digits / 4 digits, 8 digits / 3 digits, 8 digits / 4 digits)	120	5 minutes
	Addition & Subtraction	25 Monetary questions for ten 3 to 6-digit numbers (total 50 digits), 5 Monetary questions for fifteen 3 to 6-digit numbers (total 60 digits)	30	5 minutes
Grade Level 1	Multiplication	20 questions of 5-digit whole numbers (3 digits x 2 digits, 2 digits x 3 digits), 10 questions of 4-digit whole numbers (2 digits x 2 digits)	30	5 minutes
	Division	20 questions of 5-digit whole numbers (4 digits / 2 digits, 5 digits / 2 digits, 5 digits / 3 digits), 10 questions of 3-digit and 4-digit whole numbers (3 digits / 2 digits, 4 digits / 2 digits)	30	5 minutes
	Addition & Subtraction	10 whole number questions for ten 2 to 4-digit numbers (total 35 digits), 5 whole number questions for ten 2-digit numbers. (total 20 digits)	15	5 minutes
Grade Level 2	Multiplication	4-digit whole number questions of 2 digits x 2 digits	30	5 minutes
	Division	3-digit and 4-digit whole numbers (20 questions of 4 digits / 2 digits, 10 questions of 3 digits / 2 digits)	30	5 minutes
	Addition & Subtraction	Whole number questions for ten 2-digit numbers (total 20 digits)	15	5 minutes
Grade Level 3	Multiplication	4-digit whole numbers (10 questions of 3 digits x 1 digit, 20 questions of 2 digits x 2 digits)	30	5 minutes
	Division	4-digit whole numbers (20 questions of 4 digits / 1 digit, 10 questions of 3 digits / 1 digit)	30	5 minutes
	Addition & Subtraction	Whole number questions of seven 2-digit numbers (total 14 digits)	15	5 minutes
Grade Level 4	Multiplication	4-digit whole number (30 questions of 3 digits x 1 digit)	30	5 minutes
	Division	3-digit whole numbers (20 questions of 3 digits /1 digit, 10 questions of 2 digits / 1 digit)	30	5 minutes
	Addition & Subtraction	Whole number questions of six 2-digit numbers (total 12 digits)	15	5 minutes

Grade Level 5	Multiplication	3 and 4-digit whole numbers (20 questions of 2 digits x 1 digit, 10 questions of 3 digits x 1 digit)	30	5 minutes
	Addition & Subtraction (1)	Whole number questions of five 2-digit numbers (total 10 digits)	15	5 minutes
	Addition & Subtraction (2)	Whole number questions of five 2-digit numbers (total 10 digits)	15	5 minutes
Grade Level 6	Addition & Subtraction (1)	Whole number questions of four 2-digit numbers (total 8 digits)	15	5 minutes
	Addition & Subtraction (2)	Whole number questions of four 2-digit numbers (total 8 digits)	15	5 minutes
	Addition & Subtraction (3)	Whole number questions of four 2-digit numbers (total 8 digits)	15	5 minutes
Grade Level 7	Addition & Subtraction (1)	Whole number questions of four 1 and 2-digit numbers (3 2-digit, 1 1-digit numbers), total 7 digits	15	5 minutes
	Addition & Subtraction (2)	Whole number questions of four 1 and 2-digit numbers (3 2-digit, 1 1-digit numbers), total 7 digits	15	5 minutes
	Addition & Subtraction (3)	Whole number questions of four 1 and 2-digit numbers (3 2-digit, 1 1-digit numbers), total 7 digits	15	5 minutes
Grade Level 8	Addition & Subtraction (1)	Whole number questions of four 1 and 2-digit numbers (2 2-digit, 2 1-digit numbers), total 6 digits	15	5 minutes
	Addition & Subtraction (2)	Whole number questions of four 1 and 2-digit numbers (2 2-digit, 2 1-digit numbers), total 6 digits	15	5 minutes
	Addition & Subtraction (3)	Whole number questions of four 1 and 2-digit numbers (2 2-digit, 2 1-digit numbers), total 6 digits	15	5 minutes
Grade Level 9	Addition & Subtraction (1)	Whole number questions of five 1-digit numbers, total 5 digits	15	5 minutes
	Addition & Subtraction (2)	Whole number questions of five 1-digit numbers, total 5 digits	15	5 minutes
	Addition & Subtraction (3)	Whole number questions of five 1-digit numbers, total 5 digits	15	5 minutes
Grade Level 10	Addition & Subtraction (1)	Whole number questions of four 1-digit numbers, total 4 digits	15	5 minutes
	Addition & Subtraction (2)	Whole number questions of four 1-digit numbers, total 4 digits	15	5 minutes
	Addition & Subtraction (3)	Whole number questions of four 1-digit numbers, total 4 digits	15	5 minutes

Scoring and Passing Requirements for Mental Arithmetic Test:

A. Scoring: Advanced Levels: Multiplication and Division questions are 5 points each,
Addition & Subtraction questions are 20 points each.

Grade Levels: Multiplication and Division questions are 5 points each,
Addition & Subtraction questions are 10 points each.

B. Passing Requirements:

There are three categories in the test:

a) Grade level students need at least 80 points in any category, and

    i. 2nd – order grade to 10th – order grade level students must achieve a total score of 330.

    ii. 1st –order grade level students must achieve a total score of 300.

b) Advanced level students need at least 140 Points in any category and must meet the total score requirement listed below:

Advanced Level 1: 420   Advanced Level 5: 700   Advanced Level 9: 1200
Advanced Level 2: 480   Advanced Level 6: 800   Advanced Level 10: 1400
Advanced Level 3: 540   Advanced Level 7: 900   Advanced Level 10-Elite: 1600
Advanced Level 4: 620   Advanced Level 8: 1000

Appendix B (Abacus):

Level	Category	Test Question Standard	# of Questions	Time Limit
Advanced Level	Multiplication	5 questions each of 9-digit, 10-digit, 11-digit numbers which include whole, monetary, non-monetary, and mixed decimal numbers	15	20 minutes
	Division	5 questions each of 8-digit, 9-digit, 10-digit numbers which include whole, monetary, non-monetary, and mixed decimal numbers	15	
	Addition & Subtraction	5 questions each of ten 8-digit, 9-digit, 10-digit monetary numbers *10-Elite: extra 10 problems test	15/30	
Grade Level 1	Multiplication	Questions of 8-digit whole, monetary, non-monetary, and mixed decimal numbers	10	20 minutes
	Division	Questions of 7-digit whole, monetary, non-monetary, and mixed decimal numbers	10	
	Addition & Subtraction	Monetary number questions of ten 4 to 7-digit numbers	10	
Grade Level 2	Multiplication	Questions of 7-digit whole, monetary, non-monetary, and mixed decimal numbers	10	20 minutes
	Division	Questions of 6-digit whole, monetary, non-monetary, and mixed decimal numbers	10	
	Addition & Subtraction	Monetary number questions of ten 3 to 6-digit numbers	10	
Grade Level 3	Multiplication	Non-monetary number questions of 7-digit, whole numbers (5 questions of 3 digits x 4 digits, 5 questions of 4 digits x 3 digits)	10	20 minutes
	Division	Non-monetary questions of 6-digit, whole numbers (5 questions of 6 digits / 3 digits, 5 questions of 6 digits / 4 digits)	10	
	Addition & Subtraction	Monetary number questions of ten 3 to 5-digit numbers	10	
Grade Level 4	Multiplication	Non-monetary number questions of 6-digit, whole numbers (5 questions of 2 digits x 4 digits, 5 questions of 3 digits x 3 digits)	10	20 minutes
	Division	Non-monetary number questions of 5-digit, whole numbers (5 questions of 4 digits / 2 digits, 5 questions of 5 digits / 2 digits or 5 digits / 3 digits)	10	
	Addition & Subtraction	Monetary number questions of ten 3 to 4-digit numbers	10	
Grade Level 5	Multiplication	Non-monetary number questions of 4-digit, whole numbers (5 questions of 1 digit x 3 digits, 5 questions of 2 digits x 2 digits)	10	20 minutes
	Division	Non-monetary number questions of 4-digit, whole numbers (5 questions of 3 digits / 1 digit, 5 questions of 4 digits / 1 digit)	10	
	Addition & Subtraction	Non-monetary number questions of ten 2 to 3-digit numbers	10	
Grade Level 6	Addition & Subtraction	Non-monetary number questions of eight 3-digit numbers	20	20 minutes
Grade Level 7	Addition & Subtraction	Non-monetary number questions of ten 2-digit numbers	20	20 minutes
Grade Level 8	Addition & Subtraction	Non-monetary number questions of eight 2-digit numbers	20	20 minutes
Grade Level 9	Addition & Subtraction	Non-monetary number questions of 1 to 2-digit numbers (10 questions of ten 1-digit numbers, 10 questions of six 2-digits numbers)	20	20 minutes
Grade Level 10	Addition & Subtraction	Non-monetary number questions of 1 to 2-digit numbers (10 questions of eight 1-digit numbers, 10 questions of four 2-digits numbers)	20	20 minutes

Scoring and Passing Requirement for Abacus Test:

A. Scoring: Advanced Levels: Multiplication and Division questions are 10 points each,
                                      Addition & Subtraction questions are 20 points each.
           Grade Levels 1-5:   Multiplication and Division questions are 5 points each,
                                        Addition & Subtraction questions are 10 points each.
         Grade Levels 6-10: Addition & Subtraction questions are 10 points each.

B. Passing Requirements:
   a) Students in Grade levels 1-10 must achieve a minimum score of 140.
   b) Advanced level students need at least 40 points in any category and must meet the total score requirement listed below:

Advanced Level 1: 160	Advanced Level 5: 320	Advanced Level 9: 480
Advanced Level 2: 200	Advanced Level 6: 360	Advanced Level 10: 540
Advanced Level 3: 240	Advanced Level 7: 400	Advanced Level 10-Elite: 660
Advanced Level 4: 280	Advanced Level 8: 440	

10. **Grading Criteria:**

No points are given for any violation of these rules:
   A. Rounding rules for Grade level 2 and up in Multiplication and Division:
      a) Grades 1, 2 and Advanced Level: For Monetary calculations round to the 2nd place after the decimal point. Example: $12.345 should be rounded to $12.35
      b) Grade 2: For Non-monetary calculations round to the 3rd place after the decimal point.
         Example: 15.2741should be rounded to 15.274; 15.2748 should be rounded to 15.275
      c) Grade 1: For Non-monetary calculations round to the 4th place after the decimal point.
      d) Advanced level: For Non-monetary calculations round to the 5th place after the decimal point.
   B. A "non-monetary" answer with pure decimal number or mixed decimal number that ends with "zero (0)" rounded or not, is invalid. Apply this rule to A. (b, c, d). Example for A-(c): 2.1500 (invalid), 2.15 (valid).
   C. Write your answers with Arabic numbers clearly. Unclear or ambiguous writing will be considered invalid.
   D. If a question has more than one answer, no points will be given no matter if one of the answers is correct.
   E. Use a "comma (,)" to separate every third digit in a whole number which has 3 or more digits.
         Example: 5,384,200
   F. No decimal point (.) is allowed after a whole number.
   G. In a "monetary ($)" question, write two "zeros" or a "dash (-)" after the "decimal point (.)" Example: $4,832.00 or $4,832.-
   H. Underlining decimal numbers voids the answer.
   I. Draw "double lines" to cross out the entire number if you discover a mistake, then   write the correct answer under, or next to it. DO NOT USE an eraser or correction fluid to cover the wrong answer or to make a partial correction. Example: $34.78 $34.79 (valid); $34.78 $34.79 (invalid)
   J. Additional markings other than the answer will void the correct answer on that specific question.

11. **Participants found to drop levels, use an impostor, or otherwise cheat will be disqualified.**
       For matters not covered, a decision will be made on the exam date.

12. **Test Registration Fees:**
   I. Each **$ 60.00** for Abacus or Mental Arithmetic, regardless of level.
   II. Total **$ 110.00** for both Abacus and Mental Arithmetic, regardless of levels.

   Please register online and send registration fee (check payable to CAAA) to the following address:

   Chinese American Abacus Association
   1363 Jacklin Road
   Milpitas, CA 95035

   Phone: 408-389-8867 Voice mail
   Test Registration: tinyurl.com/CAAA-27th-NCA
   Website: www.caaa-abacus.org
   E-mail: CAAA.US@Gmail.com

   CAAA is a federally registered 501(c)(3) non-profit organization