

Testing Rules of the CAAA Annual Abacus & Mental Arithmetic Assessment Test

1. Objective: The intent of this event is to promote the Chinese cultural tradition of Abacus and Mental Arithmetic, and in doing so further Abacus and Mental Arithmetic education worldwide.
2. Qualification: Students who have attended abacus and mental math classes.
3. Time: Annually on first or 3rd Sunday in May.
4. Categories: Abacus and Mental Arithmetic
5. Levels: a) Advanced Levels: 1 to 10
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 Levels.
7. Events and Standards: See Appendix 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)	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)	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 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

8-1. 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 out of a full score of 600 in any category and must meet the total score requirement listed below:

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

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	15	
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 ten 2 to 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

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

9. 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: 15.2741 should 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.

10. Test Registration Fees: \$39 for each person per item per grade level test, \$45 for per item per advanced test.

Please send application form and registration fee (check payable to CAAA) to the following address:

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1363 Jacklin Road
Milpitas, CA 95035

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