

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

## Sacramento CA, Southern CA, San Diego CA, Midwest, Chicago & East Coast

- 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 3<sup>rd</sup> Sunday in May.
- 4. Categories: Abacus and Mental Arithmetic
- 5. Levels: a) Grade Levels: 1 to 10 b) Advanced Levels: 1 to 10 and 10-Elite
- 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. Student who qualify for Advanced 10 or Advanced 10-Elite will be awarded Scholarship.
- 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

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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
	Addition & Subtraction (1)	Whole number questions of four 2-digit numbers (total 8 digits)	15	5 minutes
Grade Level 6	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
Condo	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
Grade Level 7	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
Con 1	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
Grade Level 8	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
	Addition & Subtraction (1)	Whole number questions of five 1-digit numbers, total 5 digits	15	5 minutes
Grade Level 9	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.  $2^{nd}$  order grade to  $10^{th}$  order grade level students must achieve a total score of 330.
  - ii. 1<sup>st</sup> –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 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	3 (Abacus):  Category	Test Question Standard	# of Questions	Time Limit
Advanced		5 questions each of 9-digit, 10-digit, 11-digit		
	Multiplication	numbers which include whole, monetary, non- monetary, and mixed decimal numbers	15	
		5 questions each of 8-digit, 9-digit, 10-digit		
Level	Division	numbers which include whole, monetary, non-	15	
	Division	monetary, and mixed decimal numbers	13	20 minutes
	Addition &	5 questions each of ten 8-digit, 9-digit, 10-digit		
	Subtraction	monetary numbers	15	
		Questions of 8-digit whole, monetary, non- monetary, and mixed decimal numbers		
	Multiplication	-	10	
Grade	5	Questions of 7-digit whole, monetary, non- monetary, and mixed decimal numbers	4.0	20 : .
Level 1	Division		10	20 minutes
	Addition &	Monetary number questions of ten 4 to 7-digit numbers	10	
	Subtraction	Questions of 7-digit whole, monetary, non-	10	
	Multiplication	monetary, and mixed decimal numbers	10	
Grade	Multiplication	Questions of 6-digit whole, monetary, non-	10	
Level 2	Division	monetary, and mixed decimal numbers	10	20 minutes
LCVCI 2	Addition &	Monetary number questions of ten 3 to 6-digit		20 minutes
	Subtraction	numbers	10	
		Non-monetary number questions of 7-digit, whole		
	Multiplication	numbers (5 questions of 3 digits x 4 digits, 5 questions of 4 digits x 3 digits)	10	
Grade		Non-monetary questions of 6-digit, whole numbers		
Level 3	Division	(5 questions of 6 digits / 3 digits, 5 questions of	10	20 minutes
		6 digits / 4 digits)  Monetary number questions of ten 3 to 5-digit	10	
	Addition &	numbers	10	
	Subtraction	Non-monetary number questions of 6-digit, whole	10	
	Multiplication	numbers (5 questions of 2 digits x 4 digits, 5	10	
Grade	Withitipheation	questions of 3 digits x 3 digits)	10	
Level 4		Non-monetary number questions of 5-digit, whole numbers (5 questions of 4 digits / 2 digits, 5	4.0	20 minutes
Ec ver i	Division	questions of 5 digits / 2 digits or 5 digits / 3 digits)	10	20 mmates
	Addition &	Monetary number questions of ten 3 to 4-digit		
	Subtraction	numbers	10	
		Non-monetary number questions of 4-digit, whole		
	Multiplication	numbers (5 questions of 1 digit x 3 digits, 5 questions of 2 digits x 2 digits)	10	
Grade		Non-monetary number questions of 4-digit, whole		
Level 5	Division	numbers (5 questions of 3 digits / 1 digit, 5	10	20 minutes
		questions of 4 digits / 1 digit)  Non-monetary number questions of ten 2 to 3-digit	-	1
	Addition & Subtraction	numbers	10	
Grade	Addition &	Non-monetary number questions of ten 2 to 3-digit	10	
Level 6	Subtraction	numbers	20	20 minutes
Grade	Addition &	Non-monetary number questions of ten 2-digit	20	
Level 7	Subtraction	numbers	20	20 minutes
Grade	Addition &	Non-monetary number questions of eight 2-digit	-	****
Level 8	Subtraction	numbers	20	20 minutes
Grade	Addition &	Non-monetary number questions of 1 to 2-digit		
Level 9	Subtraction	numbers (10 questions of ten 1-digit numbers, 10 questions of six 2-digits numbers)	20	20 minutes
Grade	Addition &	Non-monetary number questions of 1 to 2-digit		
Level 10	Subtraction	numbers (10 questions of eight 1-digit numbers, 10	20	20 minutes
		questions of four 2-digits numbers)	20	20 1111111111111

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

#### 8. 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 2<sup>nd</sup> place after the decimal point. Example: \$12.345 should be rounded to \$12.35
  - b) Grade 2: For Non-monetary calculations round to the 3<sup>rd</sup> 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 4<sup>th</sup> place after the decimal point.
  - d) Advanced level: For Non-monetary calculations round to the 5<sup>th</sup> 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.

#### 9. Test Registration Fees:

- I. \$55.00 for Abacus or Mental Arithmetic, regardless of level.
- II. \$100.00 for both Abacus and Mental Arithmetic, regardless of levels.

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

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Phone: 408- 389-8867

Website: <a href="www.caaa-abacus.org">www.caaa-abacus.org</a> E-mail: CAAA.US@Gmail.com

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