Arizona

Arizona's Instrument to Measure Standards Alternate

AIMS A

2013

Technical Report

Arizona Department of Education
Assessment Section
1535 West Jefferson
Phoenix, AZ 85007

Foreword

The technical information herein is intended for use by those who evaluate tests, interpret scores, or use test results in making educational decisions. It is assumed that the reader has technical knowledge of test construction and measurement procedures, as stated in *Standards for Educational and Psychological Testing* (American Educational Research Association, American Psychological Association, National Council on Measurement in Education, 1999).

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Part 1: Executive Summary

This document provides information regarding processes and procedures implemented in the 2013 Spring Arizona's Instrument to Measure Standards Alternate (AIMS A) assessments for the development of tests, analysis of data, scoring, and scaling. This document also describes the results of the 2013 Spring AIMS A assessments. The technical information in this report is intended for those who evaluate tests, interpret scores, or use test results in making educational decisions.

This document also provides information relevant to the *Standards for Educational and Psychological Testing* (American Education Research Association, American Psychological Association, National Council on Measurement in Education, 1999). Each part of this technical report addresses different standards. The standards addressed by each part are listed at the beginning of each part. Part 1 of the Technical Report addresses standards 2.7, 3.2, 3.3, 6.3, 6.4, 6.15, and 13.6.

Arizona includes all students with disabilities in state-wide assessments with or without accommodations, however, a small percentage of students are unable to participate in these assessments even with accommodations. Arizona's Instrument to Measure Standards Alternate (AIMS A) is an alternate assessment based on alternate achievement standards that was specifically developed to assess students with significant cognitive disabilities (SCDs) as prescribed by Title I of the Elementary and Secondary Education Act (ESEA) and the Individuals with Disabilities in Education Act (IDEA). AIMS A measures student ability on grade-level alternate academic standards; these standards are based on the Arizona Academic Standards, however, the breadth, depth, and complexity has been reduced as delineated in federal laws covering this population (NCLB, 2001 and IDEA, 2004).

Arizona has established eligibility criteria for students to qualify for an Alternate Assessment. Individualized Education Program (IEP) teams have been trained to utilize the AIMS A eligibility form and flow chart (http://www.azed.gov/wp-content/uploads/PDF/AIMSEligibilityForm.pdf) to identify students with significant cognitive disabilities who would be eligible to take AIMS A. (A copy of the eligibility form can be found in Appendix A.) Students who are tested with AIMS A are students who function at developmental and instructional levels significantly below those students who are assessed with the general standardized state assessment, AIMS. Students who are eligible for AIMS A are students with significant cognitive disabilities (SCDs) meeting the three eligibility requirements: students function like students with various levels of intellectual disabilities, and their skills and abilities are commensurate to their level of cognitive functioning based on empirical evidence preventing the acquisition of grade-level Arizona Academic Content Standards; they require intensive instruction, as it is extremely difficult for students with significant cognitive disabilities to acquire, maintain, generalize, and apply academic skills across environments even with extensive/intensive, pervasive, frequent, and individualized instruction in multiple settings; and the curricular outcomes for students with significant cognitive disabilities are based on the goals and objectives in the student IEPs and instruction is aligned to the enrolled grade level Arizona Alternate Academic Standards (http://www.azed.gov/special-education/aimsa/teachers/).

Children with SCDs are a unique population of students with extremely diverse abilities as well as limitations. Kleinert, Browder, and Towles-Reeves (2005) characterized students with SCDs as students who have:

- varied levels of symbolic communication
- issues attending to salient features of stimuli
- difficulty with memory
- limited motor response repertoire
- difficulty generalizing learned information or skills
- difficulty with meta-cognition
- difficulty with skill synthesis
- sensory deficits and
- special health care needs.

IDEA 2004 mandates that students in special education participate in the regular state assessments. If students in special education need accommodations, accommodations are provided as long as they still produce valid scores for individuals. Using non-standard accommodations, like a calculator or reading the reading passages, would invalidate the assessment and would not produce valid scores that in turn cannot be aggregated with other scores that are valid. However, alternate assessments based on alternate achievement standards are designed specifically for students with SCDs and these students require specialized instruction (Flowers, C. & Browder, D., 2004). Substantial modifications and adaptations are made to the curriculum so that students with SCDs can access the information and demonstrate what they know (Lehr, C., & Thurlow, M., 2003). Instructional adaptation strategies, like accommodations, should be implemented during daily instruction. Only those adaptations and instructional strategies used consistently during instructional activities should be made available to the students with SCDs being assessed with AIMS A. When administering AIMS A, test administrators are trained to utilize best practice strategies, adaptations, and assistive technology to ensure students have access to and are able to demonstrate what they know. Implementing adaptations specifically to meet a student's individual needs promotes participation and progress in the general curriculum (Kleinert, H. and Kearns Farmer, J. 2001).

Items on the multiple choice and performance tasks sections of AIMS A represent the essential fundamentals taught to students with significant cognitive disabilities. The Kentucky Statewide Alternate Assessment Project (1999) suggests that states create alternate assessments that mirror the elements of daily classroom instruction. Arizona's teachers receive regular training on implementing the use of instructional adaptations as long as they allow the student to demonstrate their knowledge or responds to AIMS A items presented during the assessment administration. Teachers are trained not to influence the students' response. While this is not an exhaustive list of adaptations, teachers are encouraged to support students' access by utilizing any of the following (Kleinert, H. and Kearns Farmer, J. 2001; Denham, A, 2006):

- Visual/verbal cueing;
- Varied level of independence;
- Hand-over-hand assistance;

- Re-reading questions/passages;
- Manipulatives such as number line, calculator, clocks, or counters;
- Communication devices;
- Use symbols, pictures, or tactile objects that represent concepts.

AIMS A test administration procedures support the inclusion of assistive technology, prompting, and scaffolding to help students with SCDs demonstrate what they know. The state online web-accessed test coordinator regional training modules conducted by ADE staff for district representatives emphasize these strategies to support student achievement and success.

Assistive technology (AT) as defined by IDEA is "any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of a child with a disability." AT has become a necessary component in ensuring academic success for some students with disabilities. Effective use of AT in daily instruction allows students to access the curriculum, facilitates testing accommodations, and helps improve the performance of students who are struggling (Satterfield, B. and Satterfield, P., 2009). AIMS A allows for the use of AT as an adaptation to support student access to the online assessment and to demonstrate their knowledge.

AIMS A assesses mathematics and reading in Grades 3 – 8 and High School, and science in Grades 4, 8, and 10. AIMS A consists of two item types for each of the content areas: Multiple Choice items (presented to the student online) and Performance Tasks. The Multiple Choice items include a stem and three possible answer choices. For Multiple Choice items a score of 0 is assigned for an incorrect response and a score of 4 is assigned for a correct response. The values for these score assignments were established to allow for equal weighting of the Multiple Choice items to the Performance Task items which are scored via a 0-4 point rubric. The Performance Tasks are standardized, constructed response items which are scored on standardized data sheets based on that 0-4 rubric. The Arizona's Instrument to Measure Standards Alternate assessment system's design, administration, content, and scoring were developed based on the input of, and in participation with, Arizona educators. The present Technical Report documents all aspects of the testing cycle in the subsequent chapters. The structure of the present Technical Report mirrors the testing cycle.

Part 2: Involvement of Arizona Educators at All Levels

Part 2 of the Technical Report addresses the involvement of Arizona educators in test development. This part of the Technical Report addresses standard 3.5 of the *Standards for Educational and Psychological Testing* (AERA, APA, NCME, 1999).

Several committees met throughout the year in preparation for the 2013 AIMS A Mathematics, Reading, and Science assessments. These committees included special education teachers, general education teachers, curriculum specialists, and other related service professionals (i.e., school psychologists and administrators). The committee participants were selected from across the state and were an integral part of the AIMS A test development processes and AIMS A results interpretation. In addition to these external committees, internal teams, consisting of various Arizona Department of Education specialists and administrators, were called upon to conduct reviews to support quality assurance. The test development committee and internal team meetings included:

- Multiple Choice Item Review, conducted in June, 2012, in which the internal team reviewed each item administered in 2012. The members made notes on the items including clarity of content, overall appearance, size of font and graphics, punctuation, and grammar.
- Blueprint Review and Gap Analysis, conducted June 2012, in which the internal team reviewed the current academic standards. No adjustments were made to the blueprint as the most important concepts for assessment were identified. The internal team reviewed the item bank. From this analysis a gap was identified and a plan developed for the Item Writing committees. The plan identified which standards and concepts needed items to be developed and field tested during the 2013 administration;
- Item Writing, conducted in July 2012, in which educators wrote Multiple Choice items, and Performance Tasks aligned to the alternate content standards for possible use in the spring of 2013 as field test items; new Rater items were not developed as they are being phased out and will no longer be an item type on the 2013 AIMS A.
- Content and Bias Review, conducted in July 2012, in which educators reviewed Multiple Choice items, and Performance Tasks, from all content areas for content, bias, and sensitivity. Items that passed these reviews were eligible for inclusion on the 2013 AIMS A assessment;
- External Consultant Final Document Review, conducted in November 2012, external consultants (special education and general education teachers, school psychologists, and special education directors) were hired to review all final test documents that were assembled and placed on the ADE development site prior to the administration of AIMS A. The external consultants attended a face to face meeting with the Alternate Assessment unit to review all multiple choice and performance items in a display similar to what the students would see when presented the items. As a team notes were made to reflect changes that needed to be implanted (i.e., spelling errors or items not fitting on the page correctly);
- ADE Internal Team, December 2012, the internal team (AIMS A coordinator, specialist, project specialist, director, and deputy associate superintendent) reviewed the documents returned by the external consultants. Decisions were made based on the feedback to make edits and revisions. A final internal review of every item was conducted prior to the test administration.

Part 3: Test Design

3.1 Content Standards

Part 3 of the Technical Report provides information regarding test design. The following AERA/APA/NCME standards are addressed: 1.2, 1.6, 3.1, 3.2, 3.3, 3.11, 6.4, 6.15, 13.3, and 13.5.

AIMS A assessment is designed to measure performance on the Arizona Alternate Content Standards adopted by the Arizona State Board of Education in May 2006 for Mathematics and Reading in Grades 3–8 and HS and Grades 4, 8, and 10 for Science. These standards are organized by strand, concept, and performance objective. Performance Objectives are specific tasks and skills that students are expected to know and be able to do. Only the strand and concept level are described below, and scores are only reported at the strand level. The AIMS A Mathematics, Reading and Science test blueprints are based on the concepts and strands of the Arizona Alternate Content Standards.

Figure 3.1.1
Arizona Alternate Reading Strands and Concepts Grades 3 – 8 and High School

Reading Grade 3	Reading Grade 4 – 8 and HS
Strand 1: Reading Process	**Strand 1: Reading Process**
Concept 1: Print Concepts	**Concept 4: Vocabulary**
Concept 3: Phonics	**Concept 5: Fluency**
Concept 4: Vocabulary	**Concept 6: Comprehension Strategies**
Concept 5: Fluency	**Strand 2: Comprehending Literary Text**
Concept 6: Comprehension Strategies	**Concept 1: Elements of Literature**
Strand 2: Comprehending Literary Text	**Strand 3: Comprehending Informational Text**
Concept 1: Elements of Literature	**Concept 1: Expository Text**
Strand 3: Comprehending Informational Text	**Concept 2: Functional Text**
Concept 1: Expository Text	
Concept 2: Functional Text	

Figure 3.1.2
Arizona Alternate Mathematics Strands and Concepts Grades 3 – 8 and 10

Mathematics Grade 3	Mathematics Grades 4, 5	Mathematics Grades 6, 7
Strand 1: Number Sense and Operations	**Strand 1: Number Sense and Operations**	**Strand 1: Number Sense and Operations**
Concept 1: Number Sense	**Concept 1: Number Sense**	**Concept 1: Number Sense**
Concept 2: Numerical Operations	**Concept 2: Numerical Operations**	**Concept 2: Numerical Operations**
Concept 3: Estimation	**Concept 3: Estimation**	**Concept 3: Estimation**
Strand 2: Data Analysis, Probability, and Discrete Mathematics	**Strand 2: Data Analysis, Probability, and Discrete Mathematics**	**Strand 2: Data Analysis, Probability, and Discrete Mathematics**
Concept 1: Data Analysis (Statistics)	**Concept 1: Data Analysis (Statistics)**	**Concept 1: Data Analysis (Statistics)**
Strand 3: Patterns, Algebra, and Functions	**Concept 2: Probability**	**Concept 2: Probability**
Concept 1: Patterns	**Strand 3: Patterns, Algebra, and Functions**	**Concept 4: Vertex-Edge Graphs**
Concept 3: Algebraic Representations	**Concept 1: Patterns**	**Strand 3: Patterns, Algebra, and Functions**
Strand 4: Geometry and Measurement	**Concept 3: Algebraic Representations**	**Concept 1: Patterns**
Concept 1: Geometric Properties	**Strand 4: Geometry and Measurement**	**Concept 3: Algebraic Representations**
Concept 4: Measurement	**Concept 1: Geometric Properties**	**Strand 4: Geometry and Measurement**
	Concept 4: Measurement	**Concept 1: Geometric Properties**
	Strand 5: Structure and Logic	**Concept 3: Coordinate Geometry**
	Concept 2: Logic and Reasoning	**Concept 4: Measurement**
		Strand 5: Structure and Logic
		Concept 2: Logic and Reasoning

Mathematics Grade 8	Mathematics Grade 10
Strand 1: Number Sense and Operations	**Strand 1: Number Sense and Operations**
Concept 1: Number Sense	**Concept 1: Number Sense**
Concept 2: Numerical Operations	**Concept 2: Numerical Operations**
Concept 3: Estimation	**Concept 3: Estimation**
Strand 2: Data Analysis, Probability, and Discrete Mathematics	**Strand 2: Data Analysis, Probability, and Discrete Mathematics**
Concept 1: Data Analysis (Statistics)	**Concept 1: Data Analysis (Statistics)**
Concept 2: Probability	**Concept 2: Probability**
Concept 4: Vertex-Edge Graphs	**Strand 3: Patterns, Algebra, and Functions**
Strand 3: Patterns, Algebra, and Functions	**Concept 1: Patterns**
Concept 1: Patterns	**Concept 2: Functions and Relationships**
Concept 3: Algebraic Representations	**Concept 3: Algebraic Representations**
Strand 4: Geometry and Measurement	**Strand 4: Geometry and Measurement**
Concept 1: Geometric Properties	**Concept 1: Geometric Properties**
Concept 3: Coordinate Geometry	**Concept 2: Transformation of Shapes**
Concept 4: Measurement	**Concept 3: Coordinate Geometry**
Strand 5: Structure and Logic	**Concept 4: Measurement**
Concept 2: Logic and Reasoning	**Strand 5: Structure and Logic**
	Concept 1: Algorithms and Algorithmic Thinking
	Concept 2: Logic and Reasoning

Figure 3.1.3
Arizona Alternate Science Strands and Concepts – Grades 4, 8, and 10

Science Grade 4	Science Grade 8
Strand 1: Inquiry Process	**Strand 1: Inquiry Process**
Concept 1: Observations, Questions, and Hypotheses	**Concept 1: Observations, Questions, and Hypotheses**
Concept 2: Scientific Testing (Investigating and Modeling)	**Concept 2: Scientific Testing (Investigating and Modeling)**
Concept 3: Analysis and Conclusions	**Concept 3: Analysis and Conclusions**
Concept 4: Communication	**Concept 4: Communication**
Strand 2: History and Nature of Science	**Strand 2: History and Nature of Science**
Concept 1: History of Science as a Human Endeavor	**Concept 1: History of Science as a Human Endeavor**
Strand 3: Science in Personal and Social Perspectives	**Strand 3: Science in Personal and Social Perspectives**
Concept 1: Changes in Environments	**Concept 1: Changes in Environments**
Concept 2: Science and Technology in Society	**Concept 2: Science and Technology in Society**
Strand 4: Life Science	**Strand 4: Life Science**
Concept 1: Characteristics of Organisms	**Concept 2: Reproduction and Heredity**
Concept 3: Organisms and Environments	**Concept 4: Diversity, Adaptation, and Behavior**
Concept 4: Diversity, Adaptation, and Behavior	**Strand 5: Physical Science**
Strand 5: Physical Science	**Concept 1: Properties and Changes of Properties in Matter**
Concept 3: Energy and Magnetism	**Concept 2: Motion and Forces**
Strand 6: Earth and Space Science	
Concept 2: Earth's Processes and Systems	
Concept 3: Changes in the Earth and Sky	

Science Grade 10

Strand 1: Inquiry Process

- **Concept 1: Observations, Questions, and Hypotheses**
- **Concept 2: Scientific Testing (Investigating and Modeling)**
- **Concept 3: Analysis, Conclusions, and Refinements**
- **Concept 4: Communication**

Strand 2: History and Nature of Science

- **Concept 1: History of Science as a Human Endeavor**

Strand 3: Science in Personal and Social Perspectives

- **Concept 1: Changes in Environments**
- **Concept 2: Science and Technology in Society**
- **Concept 3: Human Population Characteristics**

Strand 4: Life Science

- **Concept 1: The Cell**
- **Concept 2: Molecular Basis of Heredity**
- **Concept 3: Interdependence of Organisms**
- **Concept 4: Biological Evolution**
- **Concept 5: Matter, Energy, and Organization in Living Systems (Including Human Systems)**

Strand 5: Physical Science

- **Concept 1: Structure and Properties of Matter**
- **Concept 2: Motions and Forces**
- **Concept 3: Conservation of Energy and Increase in Disorder**
- **Concept 4: Chemical Reactions**
- **Concept 5: Interactions of Energy and Matter**

Strand 6: Earth and Space Science

- **Concept 1: Geochemical Cycles**
- **Concept 2: Energy in the Earth System (Both Internal and External)**
- **Concept 3: Origin and Evolution of the Earth System**
- **Concept 4: Origin and Evolution of the Universe**

3.2 Test Blueprints

A test blueprint designates the percentage of items that should measure each strand and concept. All AIMS A assessments were designed in accordance with the following blueprints. Further discussion of item selection to match the blueprints is included in Part 4 of this report.

Table 3.2.1
AIMS A Blueprint for Reading

	GRADE 3		GRADE 4		GRADE 5		GRADE 6	
Reading	**POs**	**Percent of Test**	**POs**	**Percent of Test**	**POs**	**Percent of Test**	**POs**	**Percent of Test**
Strand 1	10	57%	6	40%	6	37%	8	40%
Strand 2	3	13%	5	23%	4	20%	3	27%
Strand 3	8	30%	6	37%	6	43%	7	33%
TOTAL	21	100%	17	100%	16	100%	18	100%

	GRADE 7		GRADE 8		GRADE HS	
Reading	**POs**	**Percent of Test**	**POs**	**Percent of Test**	**POs**	**Percent of Test**
Strand 1	10	50%	10	43%	7	50%
Strand 2	3	23%	4	13%	2	27%
Strand 3	6	27%	8	43%	5	23%
TOTAL	19	100%	22	100%	14	100%

Table 3.2.2
AIMS A Blueprint for Mathematics

	GRADE 3		GRADE 4		GRADE 5		GRADE 6	
Math	**POs**	**Percent of Test**	**POs**	**Percent of Test**	**POs**	**Percent of Test**	**POs**	**Percent of Test**
Strand 1	15	67%	12	53%	11	50%	12	33%
Strand 2	2	7%	3	13%	4	13%	7	30%
Strand 3	2	10%	3	13%	3	13%	2	10%
Strand 4	5	17%	7	20%	4	23%	8	27%
Strand 5								
TOTAL	24	100%	25	100%	22	100%	29	100%

	GRADE 7		GRADE 8		GRADE HS	
Math	**POs**	**Percent of Test**	**POs**	**Percent of Test**	**POs**	**Percent of Test**
Strand 1	8	23%	5	13%	6	17%
Strand 2	8	37%	7	27%	8	20%
Strand 3	4	23%	4	33%	5	30%
Strand 4	7	17%	7	27%	10	33%
Strand 5						
TOTAL	27	100%	23	100%	29	100%

Table 3.2.3
AIMS A Blueprint for Science Grades 4, 8, and 10

	GRADE 4		GRADE 8		GRADE 10	
Science	**POs**	**Percent of Test**	**POs**	**Percent of Test**	**POs**	**Percent of Test**
Strand 1	10	30%	16	47%	12	27%
Strand 2	4	13%	5	27%	5	13%
Strand 3						
Strand 4	12	57%	6	27%	20	60%
Strand 5						
Strand 6						
TOTAL	24	100%	25	100%	22	100%

3.3 Description of AIMS A 2013 Tests

The test blueprints were used with the processes described in Part 4 to develop all AIMS A tests administered in 2013. All viable items were used to as closely as possible match the blueprint. The resulting test configurations are as follows.

3.3.1 Reading

The AIMS A Reading tests consisted of 15 multiple-choice items and 15 performance tasks developed by Arizona teachers. All items were scored on a basis of 4 raw score points per item. The raw scores ranged from 0-100 and scale scores were designed to range from 1000 to 1500. All items on the Reading tests reported to a criterion-referenced score. All Reading tests included 10 embedded field test items.

3.3.2 Mathematics

The AIMS A Mathematics tests consisted of 15 multiple-choice items and 15 performance tasks developed by Arizona teachers. All items were scored on a basis of 4 raw score points per item. The raw scores ranged from 0-100 and scale scores were designed to range from 1000 to 1500. All items on the Mathematics tests reported to a criterion-referenced score. All Mathematics tests included 10 embedded field test items.

3.3.3 Science

The AIMS A Science consisted of 15 multiple-choice items and 15 performance tasks developed by Arizona teachers. All items were scored on a basis of 4 raw score points per item. The raw scores ranged from 0-100 and scale scores were designed to range from 1000 to 1500. All items on the Science tests reported to a criterion-referenced score. All Science tests included 10 embedded field test items.

Table 3.3.1
2013 AIMS A Test Structure Reading

Test items and item types address all strands. While all strands are assessed on the 2013 AIMS A assessments not all strands are assessed by both item types.

		Number of Items	Multiple Choice	Performance Tasks
Grade 3				
Strand 1 - Reading Process		17	6	11
Strand 2 - Comprehending Literary Text		4	3	1
Strand 3 - Comprehending Informational Text		9	6	3
	Total	30	15	15
Grade 4				
Strand 1 - Reading Process		12	8	4
Strand 2 - Comprehending Literary Text		7	3	4
Strand 3 - Comprehending Informational Text		11	4	7
	Total	30	15	15
Grade 5				
Strand 1 - Reading Process		11	6	5
Strand 2 - Comprehending Literary Text		6	1	5
Strand 3 - Comprehending Informational Text		13	8	5
	Total	30	15	15
Grade 6				
Strand 1 - Reading Process		12	8	4
Strand 2 - Comprehending Literary Text		8	4	4
Strand 3 - Comprehending Informational Text		10	3	7
	Total	30	15	15
Grade 7				
Strand 1 - Reading Process		15	10	5
Strand 2 - Comprehending Literary Text		7	0	7
Strand 3 - Comprehending Informational Text		8	5	3
	Total	30	15	15
Grade 8				
Strand 1 - Reading Process		13	5	8
Strand 2 - Comprehending Literary Text		4	1	3
Strand 3 - Comprehending Informational Text		13	9	4
	Total	30	15	15
High School				
Strand 1 - Reading Process		15	8	7
Strand 2 - Comprehending Literary Text		7	3	4
Strand 3 - Comprehending Informational Text		8	4	4
	Total	30	15	15

Table 3.3.2
2013 AIMS A Test Structure Mathematics

	Number of Items	Multiple Choice	Performance Tasks
Grade 3			
Strand 1- Number Sense and Operations	20	7	13
Strand 2- Data Analysis, Probability, and Discrete Mathematics	2	2	0
Strand 3- Patterns, Algebra, and Functions	3	1	2
Strands 4 & 5- Geometry, Measurement, Structure & Logic	5	5	0
Total	30	15	15
Grade 4			
Strand 1- Number Sense and Operations	16	4	12
Strand 2- Data Analysis, Probability, and Discrete Mathematics	3	3	0
Strand 3- Patterns, Algebra, and Functions	4	3	1
Strands 4 & 5- Geometry, Measurement, Structure & Logic	7	5	2
Total	30	15	15
Grade 5			
Strand 1- Number Sense and Operations	16	7	9
Strand 2- Data Analysis, Probability, and Discrete Mathematics	4	3	1
Strand 3- Patterns, Algebra, and Functions	3	3	0
Strands 4 & 5- Geometry, Measurement, Structure & Logic	7	2	5
Total	30	15	15
Grade 6			
Strand 1- Number Sense and Operations	10	5	5
Strand 2- Data Analysis, Probability, and Discrete Mathematics	9	1	8
Strand 3- Patterns, Algebra, and Functions	3	2	1
Strands 4 & 5- Geometry, Measurement, Structure & Logic	8	7	1
Total	30	15	15
Grade 7			
Strand 1- Number Sense and Operations	7	7	0
Strand 2- Data Analysis, Probability, and Discrete Mathematics	11	1	10
Strand 3- Patterns, Algebra, and Functions	6	1	5
Strands 4 & 5- Geometry, Measurement, Structure & Logic	6	6	0
Total	30	15	15
Grade 8			
Strand 1- Number Sense and Operations	5	3	2
Strand 2- Data Analysis, Probability, and Discrete Mathematics	8	3	5
Strand 3- Patterns, Algebra, and Functions	9	4	5
Strands 4 & 5- Geometry, Measurement, Structure & Logic	8	5	3
Total	30	15	15
High School			
Strand 1- Number Sense and Operations	5	3	2
Strand 2- Data Analysis, Probability, and Discrete Mathematics	7	5	2
Strand 3- Patterns, Algebra, and Functions	8	0	8
Strands 4 & 5- Geometry, Measurement, Structure & Logic	10	7	3
Total	30	15	15

Table 3.3.3
2013 AIMS A Test Structure Science

		Number of Items	Multiple Choice	Performance Tasks
Grade 4				
Strand 1- Inquiry Process		9	7	2
Strands 2 & 3- History, Nature, Personal and Social		4	2	2
Strands 4, 5 & 6 - Science Content		17	6	11
	Total	30	15	15
Grade 8				
Strand 1- Inquiry Process		14	10	4
Strands 2 & 3-History, Nature, Personal and Social		8	3	5
Strands 4, 5 & 6 - Science Content		8	2	6
	Total	30	15	15
Grade 10				
Strand 1- Inquiry Process		8	5	3
Strands 2 & 3- History, Nature, Personal and Social		4	0	4
Strands 4, 5 & 6- Science Content		18	10	8
	Total	30	15	15

Table 3.3.4 Raw Score and Scale Score Ranges of AIMS A 2013 Assessments

AIMS A 2013

Scale Scores and Performance Levels

Gr. Performance Level	Reading		Mathematics		Science	
	Scale Score 2013	Raw Score 2013	Scale Score 2013	Raw Score 2013	Scale Score 2013	Raw Score 2013
3rd Falls Far Below	1000-1210	0-32	1000-1221	0-24		
Approaches	1211-1249	33-59	1222-1249	25-47		
Meets	1250-1301	60-97	1250-1294	48-90		
Exceeds	1302-1500	98-120	1295-1500	91-120		
4th Falls Far Below	1000-1186	0-24	1000-1221	0-29	1000-1187	0-23
Approaches	1187-1249	25-60	1222-1249	30-51	1188-1249	24-62
Meets	1250-1331	61-106	1250-1301	52-95	1250-1330	63-108
Exceeds	1332-1500	107-120	1302-1500	96-120	1331-1500	109-120
5th Falls Far Below	1000-1162	0-24	1000-1222	0-30		
Approaches	1163-1249	25-66	1223-1249	31-51		
Meets	1250-1330	67-104	1250-1302	52-98		
Exceeds	1331-1500	105-120	1303-1500	99-120		
6th Falls Far Below	1000-1164	0-26	1000-1186	0-26		
Approaches	1165-1249	27-68	1187-1249	27-59		
Meets	1250-1336	69-105	1250-1313	60-96		
Exceeds	1337-1500	106-120	1314-1500	97-120		
7th Falls Far Below	1000-1181	0-32	1000-1181	0-20		
Approaches	1182-1249	33-69	1182-1249	21-51		
Meets	1250-1339	70-106	1250-1315	52-94		
Exceeds	1340-1500	107-120	1316-1500	95-120		
8th Falls Far Below	1000-1195	0-28	1000-1200	0-24	1000-1196	0-23
Approaches	1196-1249	29-64	1201-1249	25-51	1197-1249	24-58
Meets	1250-1330	65-109	1250-1300	52-88	1250-1314	59-106
Exceeds	1331-1500	110-120	1301-1500	89-120	1315-1500	107-120
HS Falls Far Below	1000-1186	0-21	1000-1198	0-22	1000-1196	0-21
Approaches	1187-1249	22-61	1199-1248	23-46	1197-1249	22-64
Meets	1250-1344	62-111	1249-1327	47-94	1250-1308	65-108
Exceeds	1345-1500	112-120	1328-1500	95-120	1309-1500	109-120

5/14/2013

Part 4: Test Development

Part 4 of the Technical Report provides a summary of the test development activities that occurred in preparation for the spring 2013 AIMS A.

A comprehensive, multi-segment development process guides the development of assessment materials. The following section outlines this process in general terms and addresses the following AERA/APA/NCME standards: 1.6, 3.1, 3.5, 3.6, 3.7, 3.9, 3.11, 3.16, 6.4, 6.15, 7.3, 7.4, 7.7, 13.3, and 13.5.

4.1 AIMS A Test Development and Editing Process

4.1.1 Blueprint Development

The development of the 2013 AIMS A assessment blueprint was derived from the 2009 blueprint and input received from the field and the Technical Advisory Committee (TAC) about the length and structure of the assessment. The length of the test was increased slightly.

4.1.2 Item Writing and Editing

The development of the 2013 AIMS A assessments involved many educators, content specialists, and professionals from across Arizona and ADE collaborating in an effort to ensure that all newly developed items closely matched the Arizona Alternate Content Standards and the item specifications. The Arizona teachers and education professionals selected to serve on item writing committees all possessed content and assessment expertise, many of whom also had special education expertise. These committee members were selected for their ability to be creative while adhering to the test blueprint, detailed item specifications, and content limits. The participants received a considerable amount of professional development prior to writing items. Items from the previous administration were reviewed and clarified. The appearance of the items were modified to match the new format and new test items were developed by Arizona teachers using a template to capture all requirements and supporting information such as strand, concept, performance objective, and content reference documentation. New Performance Tasks were constructed and reviewed by committees of special educators and content specialists. These new items were constructed in response to an internal review of the test map and a thorough gap analysis. After the item writing workshops were concluded, test items were edited and revised by in-house content specialists, assessment specialists, and research scientists for content appropriateness and standards match.

4.1.3 Item Specifications and Review Procedures

Prior to item writing, ADE reviewed the item specifications. The Item Specifications are living documents and need to be constantly reviewed. The purpose of the review and revision was to provide further clarity for how AIMS A will measure students' understanding of the alternate content standards. This is based on feedback from previous item writing workshops and best practices utilized in the development of AIMS items. ADE staff reviewed the definition of what is being tested by each Performance Objective (PO) and where needed, clarified the PO statements, the content limits, and the

stimulus and response attribute descriptions. Taken together, these revisions further help to inform instruction by explaining in detail what each PO means at each grade level and by describing how each PO is to be tested.

The resulting documents were used during item writing. Refinements and inputs were implemented. During item writing, it became clear that the item specifications would continue to require clarification and refinement in order to assure varied PO coverage within the test blueprint each year. More and varied illustrative samples for each PO need to be created each year and adapted from prior assessment items that truly reflect the item specification components and clearly test the PO. These item specifications will continue to be refined continuously where needed.

4.1.4 Test Construction Process

Test construction for the 2013 test administration began with an internal review of the items developed at the item writing workshops. Although in 2009, the TAC suggested that fewer items be administered, after further analysis it was determined to slightly increase the number of items to be tested and without impacting the reliabilities so that student frustration levels would not be impacted. A maximum of 30 items were chosen to be administered for 2013. Each grade and content area was administered the same number of items. Each test form contained 15 Multiple Choice items and 15 Performance Tasks. This may be adjusted after final analysis of the results and a review of the reliabilities of each assessment. After the assessments were constructed they went to a quality and content review.

4.1.5 Quality Reviews

ADE personnel implemented a series of quality review checks at various stages of production to assure all AIMS A materials were as error free as possible. ADE first reviewed each component at a relatively early stage of screen production. Items were compared to the way they were presented to the content/bias review committee to be sure no unauthorized changes have been introduced. In addition to the ADE personnel conducting the quality review checks, external consultants were acquired to conduct a thorough review of all items. During this review period, they provided comments for any suggested changes or improvement to items, instructions, materials, and online system usability. A smooth AIMS A test administration requires that all test materials, including online test, Data Sheets, Performance Task Materials, and directions to test administrators are in alignment. A final quality review of all forms and documents were reviewed and approved by ADE personnel.

Table 4.1.1 Number of Field Test Items Selected

Content Area	Number of Grades	Number of Forms	Number of Items Selected
Reading	7 (grades 3-8 & HS)	7	10
Math	7 (grades 3-8 & HS)	7	10
Science	3 (grades 4, 8, & 10)	3	10
TOTAL			170

Table 4.1.2
Item Selection

Grade	Content	Multiple Choice	Performance Tasks
3	Mathematics	15	15
4	Mathematics	15	15
5	Mathematics	15	15
6	Mathematics	15	15
7	Mathematics	15	15
8	Mathematics	15	15
HS	Mathematics	15	15
3	Reading	15	15
4	Reading	15	15
5	Reading	15	15
6	Reading	15	15
7	Reading	15	15
8	Reading	15	15
HS	Reading	15	15
4	Science	15	15
8	Science	15	15
10	Science	15	15

Part 5: Test Administration

Part 5 of the Technical Report describes administration procedures, including accommodations, security, and written procedures available to test administrators and school personnel. The following AERA/APA/NCME standards are addressed: 1.13, 3.3, 3.19, 3.20, 3.21, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 6.11, 6.15, 9.1, 10.1, and 10.2.

5.1 Adaptations

5.1.1 Overview of Adaptations

Some students taking the general assessment (AIMS) are allowed accommodations. Accommodations are specific practices and procedures that provide students with equitable access during instruction and assessment. Students with Significant Cognitive Disabilities (SCDs) require much more intensive instructional support which is provided through instructional adaptations. Significant adaptations and best practice strategies are necessary to develop an instructional environment to meet the unique abilities of students with SCDs. Instructional adaptation strategies, like accommodations, should be implemented during daily instruction. Only those adaptations and instructional strategies used consistently during instructional activities should be made available to the students with SCDs being assessed on AIMS A. Table 5.1.1 illustrates the adaptations (accommodations) actually provided to students during the 2013 administration.

Students identified as having a SCD are dismissed from ELL programs based on the IEP team decisions. This is in accordance with Federal and State mandates that the IEP team decisions need to be documented in the student's IEP. This documentation drives the educational program and all services for the student and supersedes Arizona Revised Statutes and Arizona Administrative Code (http://www.ade.az.gov/oelas/downloads/SPEDPowerPoint-HandlingIssueswithDualLabels.pdf).

Multiple Choice Items and Performance Tasks, include text with reduced cognitive loads and are supported with graphics as appropriate. Test administrators adhere to the accommodation and adaption guidance when administering the test. To further encourage appropriate access to AIMS A so that all students with SCDs can demonstrate their knowledge, guidance is also provided in the test instructions to utilize verbal and non-verbal support, objects, pictures, symbol systems, and manipulatives.

Any instructional adaptations or strategies can be used to support students with SCDs as long as the students indicate the response choices. The following are adaptations actually provided to students on the 2013 AIMS A assessments; however, this is not an exhaustive list of adaptations that could be utilized.

Table 5.1.1
2013 AIMS A Adaptations Provided

	Number of Students Using Adaptation								
Adaptation	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 10	Grade 11	Grade 12
Adaptive calculators	96	116	150	173	150	191	225	28	27
Alphabet line	515	470	437	426	364	359	260	36	26
Graph paper	90	106	119	146	107	115	106	15	11
Highlight or mark key phrases, words, or letters	452	445	445	507	408	420	377	45	36
Line drawings	217	221	202	212	163	191	185	23	14
Magnifier	51	57	58	51	37	41	49	12	3
Manipulatives	816	797	739	805	675	654	589	71	59
Number line	642	644	627	645	548	540	440	51	37
Other	198	207	208	219	211	185	141	16	13
Picture/Object system	417	381	354	402	320	306	279	35	38
Read passages or any test item/describe graphics	801	793	779	846	789	758	642	87	59
Sign language	159	149	150	142	98	99	89	15	13
Switch	112	103	102	109	103	98	73	12	10
Symbolic/Picture system	415	406	370	387	309	306	269	39	44
Use of objects	589	551	497	548	453	454	342	40	40
Total Used	5586	5459	5257	5652	4767	4748	4141	529	433

Note: Students may and do use multiple adaptations on the three assessments, Mathematics, Reading and Science. Students may be counted as many as three times in any one cell and in multiple cells within a column.

5.2 Test Security

All AIMS A tests were administered under secure testing conditions. Figure 5.2.1 includes the security agreement signed by personnel involved with testing administration.

Figure 5.2.1 2013 AIMS A Test Security Agreement

Arizona's Instrument to Measure Standards
AIMS A Test Security / Testing Ethics Agreement 2013

I acknowledge that AIMS A is a secure test, and I agree to the following conditions of use to ensure the security of the test:

1. I will take necessary precautions to safeguard test materials.
    a. Limit access to persons with a responsible, professional interest in the test's security.
    b. Names of all persons having access to the materials will be kept on file by the special education director.
    c. All persons having access to the AIMS A test materials (other than students to whom the test is administered) will sign the test security agreement.
        i. Building administrators will maintain signed agreements of building staff.
        ii. Special Education Directors will maintain signed agreements of building administrators.
2. I will keep all test materials secure, limiting access to Test Administrators.
    a. Test materials will be kept secure until they are actually distributed to students.
    b. In no case will students be permitted to remove test materials from the room where testing takes place except under supervision of staff.
3. I will not report students' answer choices based on previous experience outside the testing window.
4. I will attend training and properly administer all sections of AIMS A.
5. I will not examine the AIMS A to determine the content beyond the requirements to administer the test.
    a. No content of the test will be disclosed or allowed to be disclosed.
    b. No test item will be discussed at any time.
6. After completing the test administration, I will store all testing materials, including student data sheets, in a secure area.
7. I will not use any test materials for instruction before or after test administration.
8. I understand the district superintendent or charter operator will develop, distribute, and enforce disciplinary procedures for the violation of test security by district or agency staff.

Individuals that will be administering the AIMS A for 2013 must also:

- participate in training activities prior to administering the AIMS A;
- review *AIMS A Test Administration Directions* for 2013 prior to test date;
- follow *AIMS A Test Administration Directions*; and
- secure all AIMS A test materials upon completion of testing, including all student data sheets.

By signing my name to this document, I am assuring my district/charter and the Arizona Department of Education that I will abide by the above conditions and that anyone I supervise who will have access to the 2013 AIMS A test will also sign a Test Security Agreement.

Signed By: _____

Printed Name: _____

Title: _____

School: _____

5.3 Test Administration

In order to ensure standardized testing administration for all students, a Special Education *Director's Manual* was made available to all special education directors for the spring 2013 administration. The manual included the following topics:

- Schedule of Important Dates
- Special Education Director's Responsibilities
- Scheduling Test Administration
- Students to be Tested
- Student Identification Information
- Test Materials
- Procedures During Test Administration
- Procedures Following Test Administration
- Test Security.

A separate document called the Test Administration Directions was made available to all test administrators for the spring 2013 assessments. It included the following:

- Test Administrator Responsibilities
- Arrangements Prior to Test Administration
- Test Materials and Testing Schedule
- Test Administration Guidelines
- Student Identification Information
- Detailed Scripts for Administration of Each Part of Each Test
- Procedures Following Test Administration.

For specific information related to test administration, refer to the Special Education Director's Manual and/or the Test Administration Directions. These documents can be found online at http://www.azed.gov/special-education/aimsa/special-education-directors/.

Online training modules were presented to AIMS A test coordinators across the state. All PEAs with AIMS A eligible students are required have an AIMS A test coordinator complete the mandatory online training before access to the AIMS A application system would be granted. These training PowerPoints used in the online modules can be found under the title "AIMS A 2013 Fall Regional Training" at the link above.

Part 6: Data for Operational Analysis

Part 6 of the Technical Report describes the data that were used for calibrating and scaling of the 2013 Spring AIMS A. This part also presents classical test statistics and item analysis statistics for each content area and grade level. Addressed in this part of the technical report are the following AERA/APA/NCME standards: 1.5, 1.13, 2.4, 2.8, 3.18, 6.5, and 7.1.

6.1 Data

AIMS A has one test window spanning six weeks. The 2013 assessments were administered between February 15 and March 31. Due to the close date falling on a weekend, the actual test window was through April 1, 2013. Live calibration with census data was used for operational analysis of Reading, Mathematics, and Science tests. In order to ensure valid calibration results, several data cleaning steps occurred upon receipt of raw data from the ADE Information Technology department which hosts the online test and publishes the results. These steps allowed for calibration to be conducted on valid student responses at the grade level. Records for students taking each content area test were included.

The cleaning process employed after the data were received from IT was applied to the calibration data sets for each content area and grade level:

- Multiple files were received from IT with scored multiple choice results and performance tasks scores, multiple choice items were also sent with distractors identified for analysis purposes. These files and records were merged and sorted into administered sequence as a first step.
- Records of non-responsive students and partially non-responsive students (those answering at least one item) were identified.
- Totally non-responsive students (those students who did not respond to any items) were coded blank and excluded from the calibration data set.
- Students who did respond to at least one item of any item type had their non-response coded as omit and were included in the calibration data set.
- Records of total non-responders were removed from the calibration analysis but not removed from the final scale and reports.
- No other records were excluded.

More details on calibration are included in Part 7: Calibration, Scaling, and Scoring.

6.2 Descriptive Statistics by Test

Table 6.2.1 presents descriptive statistics by test (content area and grade level) which are computed with the population data in Reading, Mathematics, and Science. The table identifies the test, grade, number of students (N), the maximum obtainable raw score (Max Score), the raw score mean (RS M), the raw score standard deviation (RS SD), and Cronbach's alpha as a measure of internal consistency by item type, Multiple Choice (MC), and Performance Task (PT). It should be noted though that the accuracy of the reliability coefficient is questionable due to the large number of non-responders in the sample and the low number of test items in the performance tasks subtests.

Table 6.2.1
2013 AIMS A Classical Test Analysis Statistics

Test	N	MAX Score MC	RS M MC	RS SD MC	Reliability (alpha) MC	MAX Score PT	RS M PT	RS SD PT	Reliability (alpha) PT
Mathematics									
03	934	60	35.61	13.89	0.77	60	30.64	15.44	0.94
04	992	60	36.67	15.48	0.83	60	33.57	15.75	0.94
05	958	60	33.08	13.54	0.75	60	36.24	15.30	0.94
06	938	60	33.72	14.49	0.78	60	36.64	14.90	0.94
07	1,023	60	35.52	14.59	0.79	60	37.64	15.57	0.95
08	976	60	33.24	13.86	0.75	60	36.74	15.47	0.94
HS	977	60	32.28	13.49	0.74	60	32.63	15.66	0.94
Reading									
03	934	60	31.40	14.05	0.76	60	38.99	15.86	0.94
04	992	60	32.38	14.03	0.78	60	40.14	16.28	0.95
05	958	60	37.38	15.92	0.84	60	42.82	16.21	0.96
06	938	60	38.37	15.58	0.84	60	42.66	16.53	0.96
07	1,023	60	40.61	15.26	0.85	60	45.00	16.64	0.96
08	976	60	39.96	16.16	0.86	60	44.51	16.33	0.96
HS	977	60	42.51	16.50	0.88	60	43.32	18.22	0.97
Science									
04	992	60	40.00	16.24	0.86	60	40.55	16.43	0.95
08	976	60	37.88	16.27	0.85	60	43.92	15.71	0.96
HS	859	60	38.92	16.42	0.86	60	41.90	17.80	0.97

Tables 6.2.2, 6.2.3, and 6.2.4 present the Lertap analysis of the 2013 AIMS A assessment standard statistics for each grade and content area tested.

Table 6.2.2
2013 AIMS A Mathematics Test Analysis

	Grade						
	3	**4**	**5**	**6**	**7**	**8**	**HS**
Number Tested	934	992	958	938	1,023	976	977
Minimum	0	0	0	0	0	0	0
Median	69.0	72.0	75.0	75.0	77.0	73.0	68.0
Mean	66.3	70.2	69.3	70.4	73.2	70.0	64.9
Maximum	119	120	120	118	120	120	120
Std. Deviation	27.0	29.2	26.0	26.4	28.0	27.1	26.7
Variance	729.3	853.4	677.3	698.8	783.2	734.8	710.5
Range	119	120	120	118	120	120	120
Interquartile Range	38	44	34	35	42	39	38
Skewness	-0.422	-0.432	-0.726	-0.758	-0.601	-0.538	-0.489
Kurtosis	-0.354	-0.421	0.132	0.136	-0.312	-0.197	-0.316
Min. Possible	0	0	0	0	0	0	0
Max. Possible	120	120	120	120	120	120	120
# No Response	14	21	17	21	14	22	22
% No Response	1.5%	2.1%	1.8%	2.2%	1.4%	2.3%	2.3%

Table 6.2.3
2013 AIMS A Reading Test Analysis

	Grade						
	3	**4**	**5**	**6**	**7**	**8**	**HS**
Number Tested	934	992	958	938	1,023	976	977
Minimum	0	0	0	0	0	0	0
Median	74.0	77.5	87.0	87.5	97.0	91.5	98.0
Mean	70.4	72.5	80.2	81.0	85.6	84.5	85.8
Maximum	118	116	120	120	120	120	120
Std. Deviation	27.1	27.6	29.3	29.3	29.9	29.9	32.6
Variance	732.6	761.6	858.5	857.5	891.6	896.7	1,062.7
Range	118	116	120	120	120	120	120
Interquartile Range	34	38	40	42	40	40	46
Skewness	-0.716	-0.764	-0.924	-0.907	-1.105	-1.019	-1.045
Kurtosis	0.018	0.011	0.260	0.109	0.386	0.388	0.166
Min. Possible	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max. Possible	120.00	120.00	120.00	120.00	120.00	120.00	120.00
# No Response	17	21	20	16	18	21	25
% No Response	1.8%	2.1%	2.1%	1.7%	1.8%	2.2%	2.6%

Table 6.2.4
2013 AIMS A Science Test Analysis

	Grade						
	3	**4**	**5**	**6**	**7**	**8**	**10**
Number Tested		992				976	859
Minimum		0				0	0
Median		87.5				90.0	91.0
Mean		80.5				81.8	80.8
Maximum		120				120	120
Std. Deviation		30.4				29.6	32.1
Variance		924.1				877.1	1,027.6
Range		120				120	120
Interquartile Range		44				41	47
Skewness		-0.858				-0.934	-0.941
Kurtosis		-0.053				0.168	-0.064
Min. Possible		0.00				0.00	0.00
Max. Possible		120.00				120.00	120.00
# No Response		20				21	23
% No Response		2.0%				2.2%	2.7%

6.3 Classical Item Analysis

Classical item analyses were conducted for all grades and content areas. Tables 6.3.1-6.3.17 present item statistics for the tests. Note that operational items are reported in sequence without embedded field test items. The tables show the number of students (N), the item difficulty (*p*-value), point biserial correlation (r_{pb}) and biserial correlation (r_{bi}) for dichotomous items, percentage of students responding to, and point biserial for the key and each distractor, and the percentage of students who omitted a multiple choice item (% Omit). The point biserial correlation (r_{pb}) reported is the correlation of the item and the total scores of the other items on the test. The biserial correlation (r_{bi}) is a statistical measure indicating the strength of the relationship between the right answer for each item relative to the total number of correct answers for all other items on the test. It is arrived at by comparing how well students did answering one item, relative to how well they did answering all the items. These coefficients answer this question: How did the people who selected an item option do on the criterion measure? If they did well on the criterion, both (r_{pb}) and (r_{bi}) will be "high," where "high" may be taken as anything over 0.30 for (r_{pb}), and anything over 0.40 for (r_{bi}). A low point-biserial implies that students who get the item correct tend to do poorly on the overall test, and students who get the item wrong tend to do well on the test, each of which indicates an anomaly.

Table 6.3.1
2013 AIMS A Classical Item Analysis
Mathematics Grade 3

Multiple Choice

				Correct			Distractor 1		Distractor 2		
Item	**Item ID**	***N***	***p*-value**	**%**	r_{pb}	r_{bi}	**%**	r_{pb}	**%**	r_{pb}	**% Omit**
1	**61093022**	906	0.70	70%	0.36	0.48	9%	-0.29	21%	-0.34	3%
2	**61093033**	904	0.65	65%	0.33	0.43	9%	-0.25	26%	-0.34	3%
3	**61093025**	906	0.83	83%	0.38	0.56	9%	-0.36	8%	-0.29	3%
4	**61113003**	908	0.53	53%	0.33	0.41	32%	-0.25	15%	-0.32	3%
5	**61093010**	908	0.55	55%	0.35	0.45	17%	-0.19	28%	-0.38	3%
6	**61133004**	903	0.42	42%	0.07	0.09	44%	-0.07	14%	-0.22	3%
7	**61093016**	906	0.72	72%	0.44	0.59	10%	-0.37	19%	-0.36	3%
8	**61103015**	905	0.30	30%	0.03	0.04	24%	-0.10	46%	-0.08	3%
9	**61103013**	902	0.58	58%	0.40	0.50	22%	-0.28	20%	-0.36	3%
10	**61103002**	904	0.57	57%	0.32	0.41	18%	-0.27	25%	-0.28	3%
11	**61093008**	904	0.50	50%	0.21	0.26	25%	-0.15	25%	-0.26	3%
12	**61113001**	906	0.71	71%	0.48	0.64	12%	-0.35	17%	-0.40	3%
13	**61113002**	902	0.71	71%	0.40	0.53	10%	-0.37	19%	-0.32	3%
14	**61113005**	900	0.62	62%	0.34	0.43	19%	-0.29	20%	-0.29	4%
15	**61093032**	905	0.82	82%	0.44	0.64	8%	-0.38	10%	-0.34	3%

Performance Tasks

			Score 0		Score 1		Score 2		Score 3		Score 4	
Item	**Item ID**	***N***	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}
16	**61093101**	934	10%	-0.57	8%	-0.29	4%	-0.16	6%	-0.05	71%	0.66
17	**61103106**	934	25%	-0.56	35%	-0.04	19%	0.19	11%	0.29	10%	0.32
18	**61093103**	934	20%	-0.63	25%	-0.18	18%	0.14	17%	0.26	22%	0.43
19	**61093104**	934	21%	-0.66	25%	-0.23	16%	0.10	11%	0.22	26%	0.60
20	**61093105**	934	22%	-0.65	29%	-0.16	17%	0.13	11%	0.21	20%	0.57
21	**61103101**	934	19%	-0.63	22%	-0.21	16%	0.09	22%	0.24	22%	0.49
22	**61103102**	934	27%	-0.64	32%	-0.11	15%	0.16	10%	0.25	17%	0.54
23	**61103103**	934	22%	-0.66	27%	-0.15	18%	0.11	12%	0.25	21%	0.52
24	**61103104**	934	29%	-0.57	32%	-0.03	15%	0.19	13%	0.32	11%	0.32
25	**61103105**	934	30%	-0.60	39%	0.05	14%	0.26	8%	0.25	9%	0.31
26	**61113101**	934	10%	-0.56	13%	-0.34	9%	-0.06	10%	-0.02	57%	0.63
27	**61113102**	934	17%	-0.62	24%	-0.19	16%	0.10	16%	0.25	27%	0.43
28	**61113103**	934	13%	-0.62	16%	-0.30	13%	-0.08	13%	0.06	46%	0.65
29	**61113104**	934	15%	-0.62	22%	-0.26	16%	0.03	15%	0.22	31%	0.53
30	**61113105**	934	17%	-0.58	21%	-0.18	18%	0.06	18%	0.22	26%	0.41

Table 6.3.2
2013 AIMS A Classical Item Analysis
Mathematics Grade 4

Multiple Choice

					Correct		Distractor 1		Distractor 2		
Item	**Item ID**	***N***	***p*-value**	**%**	r_{pb}	r_{bi}	**%**	r_{pb}	**%**	r_{pb}	**% Omit**
1	**61094029**	954	0.73	73%	0.40	0.53	15%	-0.32	12%	-0.34	4%
2	**61104020**	953	0.57	57%	0.41	0.52	19%	-0.29	25%	-0.34	4%
3	**61094025**	956	0.80	80%	0.42	0.60	14%	-0.37	7%	-0.32	4%
4	**61094019**	956	0.52	52%	0.34	0.42	27%	-0.31	21%	-0.23	4%
5	**61094042**	955	0.58	58%	0.38	0.48	18%	-0.31	24%	-0.29	4%
6	**61094035**	958	0.72	72%	0.40	0.53	17%	-0.36	11%	-0.28	3%
7	**61094022**	956	0.71	71%	0.26	0.34	22%	-0.25	7%	-0.26	4%
8	**61094040**	952	0.63	63%	0.45	0.58	17%	-0.26	20%	-0.43	4%
9	**61104017**	952	0.50	50%	0.25	0.32	33%	-0.18	17%	-0.29	4%
10	**61094012**	956	0.67	67%	0.47	0.62	13%	-0.39	19%	-0.35	4%
11	**61094007**	952	0.63	63%	0.47	0.60	15%	-0.35	23%	-0.37	4%
12	**61094003**	954	0.82	82%	0.46	0.68	9%	-0.35	9%	-0.39	4%
13	**61094018**	951	0.50	50%	0.27	0.34	15%	-0.27	35%	-0.22	4%
14	**61094043**	949	0.67	67%	0.47	0.60	17%	-0.37	16%	-0.35	4%
15	**61094044**	951	0.51	51%	0.35	0.44	18%	-0.28	31%	-0.28	4%

Performance Tasks

			Score 0		Score 1		Score 2		Score 3		Score 4	
Item	**Item ID**	***N***	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}
16	**61094101**	992	10%	-0.60	8%	-0.31	4%	-0.11	6%	-0.09	72%	0.68
17	**61104106**	992	8%	-0.57	7%	-0.33	10%	-0.18	11%	-0.04	64%	0.64
18	**61094103**	992	18%	-0.67	20%	-0.21	16%	0.04	17%	0.18	29%	0.57
19	**61094104**	992	21%	-0.65	29%	-0.17	15%	0.12	13%	0.24	22%	0.55
20	**61094105**	992	25%	-0.65	30%	-0.15	13%	0.14	10%	0.23	22%	0.56
21	**61104101**	992	9%	-0.57	13%	-0.38	9%	-0.12	11%	0.01	57%	0.65
22	**61104102**	992	26%	-0.63	31%	-0.09	18%	0.20	11%	0.28	14%	0.45
23	**61104103**	992	34%	-0.65	33%	0.01	12%	0.21	8%	0.28	14%	0.46
24	**61104104**	992	31%	-0.64	32%	-0.05	14%	0.19	8%	0.23	16%	0.52
25	**61104105**	992	32%	-0.60	34%	0.02	15%	0.24	9%	0.26	10%	0.37
26	**61114101**	992	15%	-0.63	15%	-0.20	16%	0.01	18%	0.19	36%	0.46
27	**61114102**	992	18%	-0.59	22%	-0.19	14%	0.05	15%	0.13	32%	0.52
28	**61114103**	992	18%	-0.60	21%	-0.24	13%	0.03	11%	0.14	38%	0.56
29	**61114104**	992	11%	-0.59	11%	-0.27	12%	-0.01	22%	0.12	44%	0.43
30	**61114105**	992	11%	-0.62	8%	-0.26	6%	-0.14	12%	0.02	63%	0.60

Table 6.3.3
2013 AIMS A Classical Item Analysis
Mathematics Grade 5

Multiple Choice

					Correct		Distractor 1		Distractor 2		
Item	**Item ID**	***N***	***p*-value**	**%**	r_{pb}	r_{bi}	**%**	r_{pb}	**%**	r_{pb}	**% Omit**
1	**61095009**	923	0.62	62%	0.38	0.48	21%	-0.40	17%	-0.22	4%
2	**61095044**	932	0.79	79%	0.34	0.48	13%	-0.33	8%	-0.26	3%
3	**61095017**	934	0.75	75%	0.35	0.47	14%	-0.37	11%	-0.24	3%
4	**61095024**	927	0.75	75%	0.48	0.65	12%	-0.43	13%	-0.34	3%
5	**61095043**	931	0.57	57%	0.35	0.44	16%	-0.33	26%	-0.27	3%
6	**61095042**	927	0.47	47%	0.38	0.48	26%	-0.23	27%	-0.35	3%
7	**61095032**	926	0.78	78%	0.30	0.42	9%	-0.35	14%	-0.22	3%
8	**61095041**	926	0.42	42%	0.35	0.44	29%	-0.36	30%	-0.17	3%
9	**61105003**	924	0.48	48%	0.30	0.37	22%	-0.31	30%	-0.20	4%
10	**61095045**	931	0.40	40%	0.18	0.22	15%	-0.26	44%	-0.13	3%
11	**61125002**	921	0.39	39%	0.08	0.11	24%	-0.27	37%	0.00	4%
12	**61095046**	927	0.62	62%	0.32	0.41	16%	-0.28	22%	-0.29	3%
13	**61105019**	928	0.51	51%	0.29	0.36	23%	-0.29	26%	-0.22	3%
14	**61125003**	926	0.50	50%	0.23	0.28	21%	-0.23	29%	-0.21	3%
15	**61115005**	929	0.48	48%	0.22	0.27	19%	-0.27	33%	-0.17	3%

Performance Tasks

			Score 0		Score 1		Score 2		Score 3		Score 4	
Item	**Item ID**	***N***	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}
16	**61095101**	958	14%	-0.66	15%	-0.24	17%	0.00	16%	0.16	37%	0.53
17	**61105106**	958	20%	-0.67	17%	-0.13	16%	0.05	21%	0.30	26%	0.41
18	**61105107**	958	13%	-0.65	18%	-0.26	17%	0.05	21%	0.23	31%	0.45
19	**61095104**	958	14%	-0.63	22%	-0.17	22%	0.15	20%	0.25	22%	0.31
20	**61095105**	958	22%	-0.63	31%	-0.05	21%	0.21	13%	0.28	13%	0.32
21	**61105101**	958	10%	-0.65	9%	-0.32	11%	-0.11	17%	0.08	53%	0.58
22	**61105102**	958	9%	-0.65	9%	-0.35	9%	-0.13	13%	0.01	60%	0.65
23	**61105103**	958	28%	-0.57	33%	0.01	18%	0.22	11%	0.28	10%	0.28
24	**61105104**	958	10%	-0.65	12%	-0.32	11%	-0.07	18%	0.12	48%	0.55
25	**61105105**	958	10%	-0.64	16%	-0.27	14%	-0.01	21%	0.21	39%	0.43
26	**61115101**	958	14%	-0.66	20%	-0.20	18%	0.09	18%	0.21	29%	0.43
27	**61115102**	958	11%	-0.66	13%	-0.33	11%	-0.05	17%	0.11	48%	0.58
28	**61115103**	958	18%	-0.66	22%	-0.15	18%	0.11	18%	0.26	24%	0.39
29	**61115104**	958	9%	-0.66	10%	-0.35	5%	-0.06	13%	0.02	61%	0.63
30	**61115105**	958	13%	-0.67	18%	-0.23	17%	0.05	23%	0.21	29%	0.47

Table 6.3.4
2013 AIMS A Classical Item Analysis
Mathematics Grade 6

Multiple Choice

				Correct			Distractor 1		Distractor 2		
Item	**Item ID**	***N***	***p*-value**	**%**	r_{pb}	r_{bi}	**%**	r_{pb}	**%**	r_{pb}	**% Omit**
1	**61096036**	908	0.56	56%	0.41	0.52	22%	-0.33	23%	-0.31	3%
2	**61096039**	904	0.50	50%	0.40	0.50	24%	-0.29	26%	-0.31	4%
3	**61096007**	907	0.72	72%	0.27	0.36	17%	-0.20	11%	-0.32	3%
4	**61106011**	901	0.39	39%	0.18	0.23	30%	-0.12	31%	-0.23	4%
5	**61096027**	909	0.71	71%	0.38	0.51	10%	-0.22	19%	-0.40	3%
6	**61096038**	907	0.60	60%	0.42	0.54	23%	-0.29	18%	-0.38	3%
7	**61096008**	902	0.56	56%	0.28	0.35	25%	-0.14	19%	-0.36	4%
8	**61116001**	909	0.51	51%	0.46	0.57	20%	-0.33	28%	-0.33	3%
9	**61096040**	907	0.79	79%	0.37	0.52	9%	-0.29	12%	-0.34	3%
10	**61096022**	907	0.48	48%	0.32	0.40	24%	-0.29	28%	-0.23	3%
11	**61116004**	905	0.55	55%	0.41	0.51	21%	-0.30	24%	-0.32	4%
12	**61106001**	901	0.52	52%	0.18	0.22	25%	-0.12	23%	-0.26	4%
13	**61096009**	905	0.68	68%	0.33	0.43	14%	-0.23	18%	-0.35	4%
14	**61106019**	905	0.60	60%	0.35	0.45	22%	-0.25	19%	-0.34	4%
15	**61116005**	905	0.56	56%	0.29	0.36	14%	-0.14	30%	-0.34	4%

Performance Tasks

			Score 0		Score 1		Score 2		Score 3		Score 4	
Item	**Item ID**	***N***	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}
16	**61096101**	938	8%	-0.63	9%	-0.35	10%	-0.16	13%	0.02	61%	0.64
17	**61096102**	938	8%	-0.64	7%	-0.31	9%	-0.19	16%	0.04	61%	0.59
18	**61096103**	938	10%	-0.66	8%	-0.29	10%	-0.10	17%	0.02	55%	0.60
19	**61096104**	938	10%	-0.65	10%	-0.29	13%	-0.07	18%	0.03	49%	0.59
20	**61096105**	938	10%	-0.68	10%	-0.29	12%	-0.11	16%	0.06	52%	0.61
21	**61106101**	938	10%	-0.68	10%	-0.30	11%	-0.07	21%	0.17	47%	0.50
22	**61106102**	938	15%	-0.72	9%	-0.21	9%	-0.07	14%	0.04	53%	0.64
23	**61106103**	938	24%	-0.63	30%	0.00	22%	0.25	15%	0.29	10%	0.22
24	**61106104**	938	24%	-0.63	32%	-0.03	19%	0.20	13%	0.29	12%	0.33
25	**61106105**	938	12%	-0.67	14%	-0.22	16%	-0.01	20%	0.18	38%	0.46
26	**61116101**	938	15%	-0.63	21%	-0.16	23%	0.17	20%	0.26	21%	0.27
27	**61116102**	938	15%	-0.65	21%	-0.16	19%	0.13	20%	0.24	25%	0.36
28	**61116103**	938	18%	-0.61	28%	-0.08	22%	0.22	15%	0.21	16%	0.29
29	**61116104**	938	14%	-0.68	18%	-0.24	14%	0.05	17%	0.21	37%	0.48
30	**61116105**	938	23%	-0.61	30%	-0.06	18%	0.19	14%	0.29	14%	0.32

Table 6.3.5
2013 AIMS A Classical Item Analysis
Mathematics Grade 7

Multiple Choice

					Correct		Distractor 1		Distractor 2		
Item	**Item ID**	***N***	***p*-value**	**%**	r_{pb}	r_{bi}	**%**	r_{pb}	**%**	r_{pb}	**% Omit**
1	**61097012**	990	0.62	62%	0.35	0.45	25%	-0.25	12%	-0.36	3%
2	**61097015**	994	0.52	52%	0.24	0.30	13%	-0.23	35%	-0.23	3%
3	**61097034**	992	0.56	56%	0.43	0.54	26%	-0.39	18%	-0.26	3%
4	**61097042**	994	0.51	51%	0.29	0.36	24%	-0.20	24%	-0.28	3%
5	**61097035**	992	0.49	49%	0.33	0.41	14%	-0.24	37%	-0.30	3%
6	**61117007**	994	0.65	65%	0.43	0.55	13%	-0.31	23%	-0.37	3%
7	**61097037**	995	0.66	66%	0.39	0.51	14%	-0.27	20%	-0.37	3%
8	**61117001**	992	0.58	58%	0.36	0.45	32%	-0.32	11%	-0.29	3%
9	**61097023**	994	0.78	78%	0.46	0.64	12%	-0.38	10%	-0.35	3%
10	**61097039**	994	0.47	47%	0.23	0.29	29%	-0.14	23%	-0.28	3%
11	**61097040**	995	0.56	56%	0.30	0.37	24%	-0.18	20%	-0.34	3%
12	**61097010**	994	0.69	69%	0.46	0.60	15%	-0.37	17%	-0.35	3%
13	**61097041**	994	0.86	86%	0.38	0.59	6%	-0.32	7%	-0.31	3%
14	**61117004**	993	0.62	62%	0.40	0.50	19%	-0.36	19%	-0.27	3%
15	**61097008**	990	0.58	58%	0.32	0.40	22%	-0.21	20%	-0.33	3%

Performance Tasks

			Score 0		Score 1		Score 2		Score 3		Score 4	
Item	**Item ID**	***N***	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}
16	**61097101**	1,023	7%	-0.60	7%	-0.36	7%	-0.19	14%	-0.07	65%	0.66
17	**61097102**	1,023	7%	-0.57	8%	-0.33	8%	-0.17	15%	-0.01	63%	0.58
18	**61097103**	1,023	9%	-0.62	8%	-0.33	8%	-0.16	16%	0.08	58%	0.57
19	**61097104**	1,023	8%	-0.60	16%	-0.35	14%	-0.11	18%	0.12	43%	0.58
20	**61097105**	1,023	7%	-0.59	11%	-0.41	10%	-0.16	12%	-0.01	60%	0.68
21	**61107101**	1,023	26%	-0.61	36%	0.00	17%	0.26	12%	0.28	9%	0.27
22	**61107102**	1,023	25%	-0.62	26%	-0.12	16%	0.15	12%	0.25	20%	0.46
23	**61107103**	1,023	22%	-0.67	26%	-0.15	21%	0.21	16%	0.33	15%	0.38
24	**61107104**	1,023	27%	-0.62	30%	-0.10	16%	0.22	11%	0.26	16%	0.43
25	**61107105**	1,023	20%	-0.68	23%	-0.20	13%	0.10	13%	0.23	30%	0.55
26	**61117101**	1,023	10%	-0.62	11%	-0.33	11%	-0.07	18%	0.08	50%	0.56
27	**61117102**	1,023	11%	-0.61	14%	-0.34	12%	-0.06	18%	0.13	45%	0.56
28	**61117103**	1,023	11%	-0.62	16%	-0.32	15%	-0.03	18%	0.14	40%	0.54
29	**61117104**	1,023	11%	-0.67	9%	-0.29	9%	-0.09	16%	0.05	56%	0.59
30	**61117105**	1,023	11%	-0.63	16%	-0.32	18%	-0.02	22%	0.23	34%	0.48

Table 6.3.6
2013 AIMS A Classical Item Analysis
Mathematics Grade 8

Multiple Choice

					Correct		Distractor 1		Distractor 2		
Item	**Item ID**	***N***	***p*-value**	**%**	r_{pb}	r_{bi}	**%**	r_{pb}	**%**	r_{pb}	**% Omit**
1	**61098017**	942	0.60	60%	0.35	0.44	20%	-0.32	21%	-0.27	7%
2	**61098019**	941	0.74	74%	0.35	0.48	12%	-0.34	13%	-0.28	4%
3	**61098035**	942	0.58	58%	0.34	0.43	20%	-0.26	22%	-0.31	3%
4	**61098037**	941	0.61	61%	0.37	0.47	19%	-0.34	20%	-0.27	4%
5	**61098038**	939	0.58	58%	0.20	0.25	13%	-0.31	29%	-0.15	4%
6	**61098039**	939	0.49	49%	0.14	0.17	19%	-0.26	33%	-0.10	4%
7	**61108015**	940	0.46	46%	0.20	0.25	14%	-0.16	39%	-0.24	4%
8	**61098027**	941	0.69	69%	0.47	0.62	11%	-0.40	20%	-0.36	4%
9	**61098002**	942	0.80	80%	0.43	0.61	8%	-0.36	12%	-0.35	3%
10	**61098028**	937	0.59	59%	0.41	0.52	22%	-0.34	19%	-0.31	4%
11	**61098040**	940	0.59	59%	0.37	0.46	19%	-0.30	22%	-0.30	4%
12	**61098007**	939	0.51	51%	0.27	0.34	24%	-0.27	24%	-0.21	4%
13	**61098034**	936	0.56	56%	0.34	0.43	16%	-0.28	27%	-0.30	4%
14	**61108014**	942	0.45	45%	0.18	0.22	21%	-0.16	35%	-0.21	3%
15	**61128003**	939	0.40	40%	0.10	0.13	35%	-0.04	25%	-0.24	4%

Performance Tasks

			Score 0		Score 1		Score 2		Score 3		Score 4	
Item	**Item ID**	***N***	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}
16	**61098101**	976	7%	-0.56	10%	-0.38	11%	-0.20	18%	0.01	54%	0.63
17	**61098102**	976	7%	-0.58	7%	-0.33	7%	-0.16	14%	-0.03	65%	0.59
18	**61098103**	976	8%	-0.55	11%	-0.39	10%	-0.14	12%	-0.05	59%	0.67
19	**61098104**	976	9%	-0.56	13%	-0.36	12%	-0.11	16%	0.07	50%	0.58
20	**61098105**	976	8%	-0.58	10%	-0.38	6%	-0.16	11%	-0.07	65%	0.70
21	**61108101**	976	26%	-0.62	31%	-0.10	13%	0.19	12%	0.25	18%	0.43
22	**61108102**	976	24%	-0.62	28%	-0.16	12%	0.13	15%	0.28	21%	0.48
23	**61108103**	976	25%	-0.63	30%	-0.09	16%	0.20	14%	0.31	14%	0.39
24	**61108104**	976	26%	-0.65	28%	-0.14	18%	0.25	15%	0.35	13%	0.38
25	**61108105**	976	25%	-0.65	27%	-0.17	15%	0.20	12%	0.27	21%	0.50
26	**61118101**	976	12%	-0.57	16%	-0.29	15%	0.00	20%	0.18	38%	0.45
27	**61118102**	976	12%	-0.62	16%	-0.31	13%	-0.03	19%	0.20	39%	0.51
28	**61118103**	976	15%	-0.54	21%	-0.24	20%	0.07	20%	0.26	25%	0.37
29	**61118104**	976	9%	-0.60	11%	-0.36	11%	-0.13	14%	0.04	55%	0.62
30	**61118105**	976	11%	-0.59	13%	-0.33	13%	-0.05	18%	0.11	45%	0.54

Table 6.3.7
2013 AIMS A Classical Item Analysis
Mathematics High School

Multiple Choice

					Correct		Distractor 1		Distractor 2		
Item	**Item ID**	***N***	***p*-value**	**%**	r_{pb}	r_{bi}	**%**	r_{pb}	**%**	r_{pb}	**% Omit**
1	**61090001**	940	0.54	54%	0.27	0.33	18%	-0.30	28%	-0.20	4%
2	**61090004**	939	0.63	63%	0.30	0.38	17%	-0.28	19%	-0.27	4%
3	**61090003**	938	0.65	65%	0.35	0.46	10%	-0.33	25%	-0.31	4%
4	**61100008**	937	0.69	69%	0.40	0.52	22%	-0.35	9%	-0.34	4%
5	**61090014**	938	0.56	56%	0.31	0.39	19%	-0.20	25%	-0.34	4%
6	**61090006**	936	0.57	57%	0.39	0.49	15%	-0.20	29%	-0.42	4%
7	**61090007**	938	0.32	32%	0.04	0.05	33%	-0.10	35%	-0.09	4%
8	**61090008**	939	0.70	70%	0.45	0.59	16%	-0.33	15%	-0.40	4%
9	**61100015**	938	0.78	78%	0.30	0.43	9%	-0.29	12%	-0.28	4%
10	**61090010**	934	0.61	61%	0.35	0.45	25%	-0.27	14%	-0.35	4%
11	**61090013**	936	0.45	45%	0.15	0.19	25%	-0.18	30%	-0.17	4%
12	**61090015**	938	0.55	55%	0.30	0.38	26%	-0.22	19%	-0.33	4%
13	**61090016**	937	0.52	52%	0.28	0.35	18%	-0.19	30%	-0.31	4%
14	**61110005**	936	0.32	32%	0.02	0.03	32%	-0.16	36%	-0.02	4%
15	**61100016**	936	0.52	52%	0.21	0.27	25%	-0.17	23%	-0.27	4%

Performance Tasks

			Score 0		Score 1		Score 2		Score 3		Score 4	
Item	**Item ID**	***N***	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}
16	**61090101**	977	9%	-0.56	10%	-0.36	9%	-0.15	13%	0.04	58%	0.62
17	**61090102**	977	12%	-0.63	13%	-0.32	12%	-0.07	13%	0.08	50%	0.62
18	**61090103**	977	15%	-0.66	14%	-0.30	11%	-0.05	12%	0.07	48%	0.66
19	**61090104**	977	8%	-0.58	8%	-0.27	6%	-0.15	11%	-0.03	67%	0.60
20	**61090105**	977	11%	-0.61	11%	-0.30	8%	-0.14	9%	0.00	62%	0.66
21	**61100101**	977	27%	-0.57	31%	-0.09	19%	0.20	11%	0.31	12%	0.37
22	**61100102**	977	32%	-0.63	33%	0.02	17%	0.26	10%	0.32	8%	0.33
23	**61100103**	977	35%	-0.61	32%	-0.03	15%	0.28	9%	0.34	9%	0.37
24	**61100104**	977	37%	-0.59	32%	-0.01	15%	0.32	8%	0.33	7%	0.32
25	**61110101**	977	14%	-0.62	17%	-0.26	18%	0.01	21%	0.21	30%	0.48
26	**61110102**	977	15%	-0.62	18%	-0.26	15%	0.08	22%	0.26	29%	0.41
27	**61110103**	977	23%	-0.64	24%	-0.18	16%	0.18	13%	0.26	24%	0.45
28	**61110104**	977	18%	-0.64	20%	-0.26	13%	0.02	17%	0.22	32%	0.57
29	**61110105**	977	22%	-0.66	21%	-0.21	13%	0.08	15%	0.26	29%	0.52
30	**61130105**	977	22%	-0.65	23%	-0.18	17%	0.19	16%	0.28	22%	0.41

Table 6.3.8
2013 AIMS A Classical Item Analysis
Reading Grade 3

Multiple Choice

					Correct		Distractor 1		Distractor 2		
Item	**Item ID**	***N***	***p*-value**	**%**	r_{pb}	r_{bi}	**%**	r_{pb}	**%**	r_{pb}	**% Omit**
1	**62093030**	906	0.79	79%	0.42	0.60	8%	-0.24	13%	-0.44	3%
2	**62093052**	904	0.36	36%	0.25	0.32	36%	-0.29	28%	-0.10	3%
3	**62093031**	907	0.43	43%	0.35	0.45	27%	-0.30	31%	-0.23	3%
4	**62093050**	905	0.65	65%	0.37	0.48	15%	-0.21	20%	-0.40	3%
5	**62103005**	901	0.58	58%	0.30	0.37	11%	-0.27	31%	-0.27	4%
6	**62103006**	903	0.62	62%	0.33	0.42	13%	-0.28	26%	-0.30	3%
7	**62093051**	905	0.57	57%	0.41	0.51	21%	-0.37	22%	-0.27	3%
8	**62093006**	903	0.63	63%	0.27	0.34	17%	-0.23	20%	-0.27	3%
9	**62113001**	901	0.33	33%	0.17	0.22	32%	-0.28	35%	-0.03	4%
10	**62103012**	899	0.49	49%	0.31	0.38	17%	-0.18	34%	-0.32	4%
11	**62093021**	904	0.58	58%	0.33	0.41	22%	-0.21	21%	-0.35	3%
12	**62103014**	903	0.48	48%	0.35	0.44	13%	-0.18	39%	-0.36	3%
13	**62103002**	903	0.47	47%	0.33	0.42	27%	-0.28	26%	-0.25	3%
14	**62103009**	904	0.48	48%	0.38	0.47	30%	-0.26	22%	-0.32	3%
15	**62103010**	903	0.67	67%	0.30	0.39	14%	-0.25	19%	-0.29	3%

Performance Tasks

			Score 0		Score 1		Score 2		Score 3		Score 4	
Item	**Item ID**	***N***	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}
16	**62103106**	934	14%	-0.67	13%	-0.23	9%	-0.02	14%	0.08	51%	0.57
17	**62103107**	934	11%	-0.68	8%	-0.34	6%	-0.09	11%	-0.02	63%	0.70
18	**62103108**	934	30%	-0.56	29%	0.05	18%	0.18	14%	0.25	9%	0.26
19	**62093104**	934	16%	-0.64	25%	-0.14	20%	0.12	19%	0.27	20%	0.35
20	**62103109**	934	17%	-0.64	20%	-0.18	16%	0.05	20%	0.26	28%	0.42
21	**62103101**	934	15%	-0.68	14%	-0.23	13%	0.04	17%	0.16	41%	0.51
22	**62103102**	934	10%	-0.67	10%	-0.31	10%	-0.07	18%	0.10	51%	0.56
23	**62103103**	934	11%	-0.71	10%	-0.27	10%	-0.09	15%	0.08	54%	0.61
24	**62103104**	934	10%	-0.66	9%	-0.29	11%	-0.10	17%	0.09	52%	0.57
25	**62103105**	934	15%	-0.68	18%	-0.16	16%	0.05	23%	0.25	29%	0.39
26	**62113101**	934	10%	-0.67	14%	-0.29	14%	0.02	19%	0.15	43%	0.47
27	**62113102**	934	15%	-0.67	22%	-0.15	20%	0.13	19%	0.20	25%	0.39
28	**62113103**	934	12%	-0.70	12%	-0.24	13%	0.00	21%	0.17	42%	0.48
29	**62113104**	934	9%	-0.67	9%	-0.38	5%	-0.10	8%	-0.04	69%	0.72
30	**62113105**	934	10%	-0.70	8%	-0.34	5%	-0.08	10%	-0.04	66%	0.72

Table 6.3.9
2013 AIMS A Classical Item Analysis
Reading Grade 4

Multiple Choice

					Correct		Distractor 1		Distractor 2		
Item	**Item ID**	***N***	***p*-value**	**%**	r_{pb}	r_{bi}	**%**	r_{pb}	**%**	r_{pb}	**% Omit**
1	**62094030**	952	0.08	8%	-0.22	-0.41	9%	-0.32	84%	0.34	4%
2	**62094035**	952	0.66	66%	0.47	0.61	19%	-0.36	15%	-0.37	4%
3	**62094032**	953	0.68	68%	0.47	0.61	17%	-0.38	15%	-0.36	4%
4	**62104001**	949	0.63	63%	0.48	0.62	18%	-0.37	19%	-0.37	4%
5	**62094028**	950	0.66	66%	0.37	0.47	15%	-0.27	19%	-0.35	4%
6	**62104002**	951	0.65	65%	0.31	0.40	15%	-0.20	20%	-0.35	4%
7	**62104003**	954	0.70	70%	0.31	0.41	11%	-0.17	18%	-0.37	4%
8	**62104007**	948	0.60	60%	0.34	0.43	16%	-0.19	25%	-0.37	4%
9	**62104008**	952	0.50	50%	0.30	0.38	24%	-0.24	26%	-0.27	4%
10	**62104009**	952	0.55	55%	0.27	0.34	19%	-0.12	26%	-0.36	4%
11	**62104010**	951	0.46	46%	0.37	0.47	29%	-0.28	25%	-0.29	4%
12	**62094001**	954	0.68	68%	0.21	0.27	15%	-0.17	17%	-0.27	4%
13	**62114003**	952	0.69	69%	0.44	0.58	15%	-0.38	16%	-0.33	4%
14	**62104005**	950	0.50	50%	0.37	0.47	22%	-0.35	28%	-0.24	4%
15	**62104014**	953	0.41	41%	0.15	0.19	27%	-0.15	32%	-0.17	4%

Performance Tasks

			Score 0		Score 1		Score 2		Score 3		Score 4	
Item	**Item ID**	***N***	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}
16	**62094101**	992	12%	-0.62	19%	-0.24	18%	0.05	20%	0.21	31%	0.42
17	**62094102**	992	10%	-0.60	17%	-0.33	17%	-0.03	19%	0.18	37%	0.52
18	**62094103**	992	10%	-0.64	17%	-0.31	17%	-0.03	19%	0.20	36%	0.51
19	**62094104**	992	7%	-0.59	10%	-0.38	12%	-0.12	22%	0.08	50%	0.53
20	**62094105**	992	9%	-0.63	14%	-0.34	12%	-0.07	17%	0.09	48%	0.58
21	**62104101**	992	10%	-0.65	10%	-0.35	11%	-0.10	20%	0.10	50%	0.57
22	**62104102**	992	14%	-0.66	16%	-0.26	18%	0.05	25%	0.30	27%	0.39
23	**62104103**	992	11%	-0.67	13%	-0.32	10%	-0.11	18%	0.13	48%	0.59
24	**62104104**	992	10%	-0.68	10%	-0.34	10%	-0.12	15%	0.07	55%	0.63
25	**62104105**	992	10%	-0.65	11%	-0.35	8%	-0.07	20%	0.13	50%	0.55
26	**62114101**	992	10%	-0.68	9%	-0.34	9%	-0.13	14%	0.06	57%	0.64
27	**62114102**	992	14%	-0.68	18%	-0.23	18%	0.07	18%	0.22	32%	0.47
28	**62114103**	992	12%	-0.68	16%	-0.28	15%	-0.02	16%	0.15	41%	0.57
29	**62114104**	992	12%	-0.68	15%	-0.24	14%	0.02	19%	0.20	39%	0.46
30	**62114105**	992	15%	-0.67	17%	-0.24	14%	0.06	18%	0.21	37%	0.46

Table 6.3.10
2013 AIMS A Classical Item Analysis
Reading Grade 5

Multiple Choice

					Correct		Distractor 1		Distractor 2		
Item	**Item ID**	***N***	***p*-value**	**%**	r_{pb}	r_{bi}	**%**	r_{pb}	**%**	r_{pb}	**% Omit**
1	**62095001**	929	0.76	76%	0.43	0.59	9%	-0.30	15%	-0.38	3%
2	**62095002**	931	0.67	67%	0.38	0.49	18%	-0.34	15%	-0.27	3%
3	**62105001**	930	0.69	69%	0.41	0.54	20%	-0.31	12%	-0.36	3%
4	**62095006**	928	0.64	64%	0.42	0.53	15%	-0.19	21%	-0.44	3%
5	**62095007**	933	0.65	65%	0.25	0.32	20%	-0.19	14%	-0.28	3%
6	**62095008**	932	0.73	73%	0.51	0.68	9%	-0.32	18%	-0.45	3%
7	**62095009**	930	0.60	60%	0.36	0.46	13%	-0.24	27%	-0.34	3%
8	**62095011**	928	0.70	70%	0.49	0.65	13%	-0.31	17%	-0.44	3%
9	**62095012**	929	0.68	68%	0.52	0.67	16%	-0.43	17%	-0.34	3%
10	**62125002**	928	0.47	47%	0.38	0.48	24%	-0.34	30%	-0.22	3%
11	**62115006**	927	0.59	59%	0.51	0.64	21%	-0.37	19%	-0.36	3%
12	**62105011**	926	0.61	61%	0.39	0.50	22%	-0.35	17%	-0.27	3%
13	**62115004**	925	0.70	70%	0.44	0.58	13%	-0.33	17%	-0.36	3%
14	**62115005**	930	0.64	64%	0.46	0.59	13%	-0.31	23%	-0.39	3%
15	**62105008**	928	0.52	52%	0.32	0.41	24%	-0.29	23%	-0.23	3%

Performance Tasks

			Score 0		Score 1		Score 2		Score 3		Score 4	
Item	**Item ID**	***N***	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}
16	**62095101**	958	9%	-0.69	8%	-0.33	9%	-0.11	19%	0.04	56%	0.60
17	**62095102**	958	9%	-0.71	8%	-0.30	8%	-0.14	20%	0.09	54%	0.58
18	**62095103**	958	11%	-0.67	13%	-0.29	13%	-0.03	23%	0.18	40%	0.49
19	**62095104**	958	9%	-0.68	9%	-0.37	8%	-0.10	17%	0.05	56%	0.63
20	**62095105**	958	9%	-0.69	8%	-0.34	7%	-0.16	12%	0.01	64%	0.69
21	**62105101**	958	10%	-0.71	9%	-0.30	11%	-0.08	18%	0.08	51%	0.60
22	**62105102**	958	10%	-0.72	11%	-0.27	16%	0.00	27%	0.25	35%	0.41
23	**62105103**	958	9%	-0.64	10%	-0.32	14%	-0.03	30%	0.26	36%	0.35
24	**62105104**	958	9%	-0.70	7%	-0.31	8%	-0.14	16%	0.02	60%	0.63
25	**62105105**	958	11%	-0.69	13%	-0.25	18%	-0.01	27%	0.27	32%	0.39
26	**62115101**	958	10%	-0.73	11%	-0.29	11%	-0.05	15%	0.09	52%	0.59
27	**62115102**	958	10%	-0.67	14%	-0.32	15%	0.00	22%	0.21	39%	0.46
28	**62115103**	958	9%	-0.72	14%	-0.29	12%	-0.01	19%	0.10	46%	0.55
29	**62115104**	958	11%	-0.72	14%	-0.25	17%	0.00	22%	0.24	36%	0.43
30	**62115105**	958	9%	-0.71	9%	-0.31	9%	-0.10	15%	0.06	58%	0.62

Table 6.3.11
2013 AIMS A Classical Item Analysis
Reading Grade 6

Multiple Choice

					Correct		Distractor 1		Distractor 2		
Item	**Item ID**	***N***	***p*-value**	**%**	r_{pb}	r_{bi}	**%**	r_{pb}	**%**	r_{pb}	**% Omit**
1	**62096010**	909	0.77	77%	0.42	0.59	13%	-0.32	10%	-0.37	3%
2	**62096009**	903	0.74	74%	0.50	0.67	12%	-0.36	15%	-0.41	4%
3	**62096014**	909	0.66	66%	0.45	0.58	17%	-0.32	17%	-0.38	3%
4	**62106003**	907	0.70	70%	0.42	0.55	12%	-0.37	19%	-0.31	3%
5	**62096004**	908	0.69	69%	0.34	0.44	14%	-0.24	17%	-0.33	3%
6	**62106001**	906	0.72	72%	0.43	0.57	16%	-0.37	11%	-0.31	3%
7	**62116001**	909	0.66	66%	0.38	0.50	21%	-0.38	12%	-0.24	3%
8	**62106010**	910	0.76	76%	0.51	0.70	9%	-0.33	15%	-0.45	3%
9	**62116002**	904	0.48	48%	0.39	0.49	26%	-0.16	26%	-0.41	4%
10	**62096007**	902	0.75	75%	0.44	0.60	11%	-0.37	14%	-0.34	4%
11	**62096002**	906	0.71	71%	0.52	0.69	13%	-0.38	16%	-0.41	3%
12	**62096003**	908	0.66	66%	0.41	0.53	20%	-0.38	14%	-0.26	3%
13	**62096011**	909	0.63	63%	0.45	0.57	17%	-0.33	20%	-0.35	3%
14	**62106004**	902	0.61	61%	0.43	0.55	16%	-0.31	23%	-0.35	4%
15	**62106007**	898	0.37	37%	0.05	0.07	38%	0.09	26%	-0.30	4%

Performance Tasks

			Score 0		Score 1		Score 2		Score 3		Score 4	
Item	**Item ID**	***N***	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}
16	**62096101**	938	15%	-0.65	18%	-0.15	18%	0.07	22%	0.23	27%	0.39
17	**62096102**	938	10%	-0.67	10%	-0.35	11%	-0.09	16%	0.04	53%	0.65
18	**62096103**	938	10%	-0.68	9%	-0.31	12%	-0.09	20%	0.12	49%	0.55
19	**62096104**	938	9%	-0.65	10%	-0.32	11%	-0.12	24%	0.13	46%	0.54
20	**62096105**	938	10%	-0.68	10%	-0.27	12%	-0.05	26%	0.19	41%	0.44
21	**62106101**	938	10%	-0.66	11%	-0.28	15%	-0.02	30%	0.28	33%	0.36
22	**62106102**	938	9%	-0.68	10%	-0.30	11%	-0.11	17%	0.08	53%	0.58
23	**62106103**	938	9%	-0.68	11%	-0.30	15%	-0.04	29%	0.23	37%	0.42
24	**62106104**	938	9%	-0.69	11%	-0.32	11%	-0.17	14%	0.05	55%	0.67
25	**62106105**	938	10%	-0.71	10%	-0.31	11%	-0.07	21%	0.15	48%	0.53
26	**62116101**	938	10%	-0.71	9%	-0.30	10%	-0.13	14%	0.07	56%	0.64
27	**62116102**	938	9%	-0.66	9%	-0.35	12%	-0.14	15%	0.01	54%	0.67
28	**62116103**	938	10%	-0.69	11%	-0.32	14%	-0.12	15%	0.09	51%	0.63
29	**62116104**	938	10%	-0.68	9%	-0.35	8%	-0.14	13%	0.00	61%	0.70
30	**62116105**	938	11%	-0.71	11%	-0.32	9%	-0.12	13%	0.04	57%	0.69

Table 6.3.12
2013 AIMS A Classical Item Analysis
Reading Grade 7

Multiple Choice

					Correct		Distractor 1		Distractor 2		
Item	**Item ID**	***N***	***p*-value**	**%**	r_{pb}	r_{bi}	**%**	r_{pb}	**%**	r_{pb}	**% Omit**
1	**62097007**	999	0.78	78%	0.39	0.54	9%	-0.24	12%	-0.39	2%
2	**62127003**	992	0.45	45%	0.17	0.21	24%	-0.08	31%	-0.26	3%
3	**62097003**	994	0.66	66%	0.50	0.65	17%	-0.33	17%	-0.43	3%
4	**62097004**	992	0.79	79%	0.41	0.57	9%	-0.28	12%	-0.39	3%
5	**62097005**	988	0.61	61%	0.52	0.65	21%	-0.40	18%	-0.35	3%
6	**62117001**	991	0.81	81%	0.59	0.85	9%	-0.43	10%	-0.45	3%
7	**62107005**	991	0.36	36%	0.12	0.15	27%	-0.14	37%	-0.12	3%
8	**62097010**	994	0.74	74%	0.54	0.73	10%	-0.35	16%	-0.47	3%
9	**62107006**	991	0.60	60%	0.35	0.45	25%	-0.19	15%	-0.42	3%
10	**62097008**	991	0.76	76%	0.45	0.62	8%	-0.27	16%	-0.44	3%
11	**62097002**	993	0.78	78%	0.55	0.77	9%	-0.39	14%	-0.45	3%
12	**62097001**	992	0.74	74%	0.55	0.74	12%	-0.38	14%	-0.45	3%
13	**62097015**	988	0.83	83%	0.47	0.70	7%	-0.33	10%	-0.41	3%
14	**62107004**	990	0.72	72%	0.36	0.48	14%	-0.24	14%	-0.37	3%
15	**62107002**	994	0.86	86%	0.50	0.77	7%	-0.37	7%	-0.40	3%

Performance Tasks

			Score 0		Score 1		Score 2		Score 3		Score 4	
Item	**Item ID**	***N***	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}
16	**62097101**	1,023	11%	-0.66	10%	-0.31	10%	-0.09	17%	0.11	51%	0.57
17	**62097102**	1,023	13%	-0.66	10%	-0.28	12%	-0.07	18%	0.13	47%	0.56
18	**62107106**	1,023	8%	-0.69	8%	-0.38	6%	-0.12	13%	-0.01	64%	0.68
19	**62097104**	1,023	8%	-0.67	7%	-0.37	7%	-0.16	14%	0.01	64%	0.64
20	**62097105**	1,023	11%	-0.70	9%	-0.33	9%	-0.06	17%	0.06	55%	0.61
21	**62107101**	1,023	11%	-0.68	11%	-0.21	16%	-0.02	29%	0.23	33%	0.38
22	**62107102**	1,023	9%	-0.66	10%	-0.36	11%	-0.07	17%	0.07	54%	0.58
23	**62107103**	1,023	9%	-0.69	9%	-0.33	10%	-0.10	14%	0.01	59%	0.64
24	**62107104**	1,023	9%	-0.68	6%	-0.32	6%	-0.15	13%	-0.02	66%	0.66
25	**62107105**	1,023	10%	-0.71	9%	-0.32	8%	-0.13	15%	0.05	60%	0.65
26	**62117101**	1,023	8%	-0.68	7%	-0.38	7%	-0.17	14%	-0.01	64%	0.67
27	**62117102**	1,023	10%	-0.71	9%	-0.31	10%	-0.03	24%	0.17	47%	0.49
28	**62117103**	1,023	10%	-0.73	9%	-0.33	9%	-0.06	15%	0.06	58%	0.62
29	**62117104**	1,023	9%	-0.70	7%	-0.35	9%	-0.12	14%	0.02	61%	0.65
30	**62117105**	1,023	10%	-0.70	10%	-0.34	11%	-0.07	17%	0.09	52%	0.59

Table 6.3.13
2013 AIMS A Classical Item Analysis
Reading Grade 8

Multiple Choice

					Correct		Distractor 1		Distractor 2		
Item	**Item ID**	***N***	***p*-value**	**%**	r_{pb}	r_{bi}	**%**	r_{pb}	**%**	r_{pb}	**% Omit**
1	**62128001**	938	0.61	61%	0.49	0.62	19%	-0.38	20%	-0.34	4%
2	**62098007**	941	0.90	90%	0.40	0.69	6%	-0.38	4%	-0.26	4%
3	**62128003**	941	0.53	53%	0.32	0.41	16%	-0.26	32%	-0.28	4%
4	**62098009**	945	0.66	66%	0.46	0.59	18%	-0.44	16%	-0.26	3%
5	**62098008**	941	0.87	87%	0.48	0.76	6%	-0.32	8%	-0.42	4%
6	**62138002**	939	0.62	62%	0.43	0.55	15%	-0.39	23%	-0.29	4%
7	**62098006**	942	0.63	63%	0.49	0.63	16%	-0.36	20%	-0.38	3%
8	**62098011**	939	0.71	71%	0.49	0.66	15%	-0.34	14%	-0.41	4%
9	**62098012**	940	0.69	69%	0.43	0.57	16%	-0.27	15%	-0.41	4%
10	**62098013**	936	0.64	64%	0.44	0.57	17%	-0.31	19%	-0.37	4%
11	**62098003**	940	0.57	57%	0.35	0.44	23%	-0.32	20%	-0.24	4%
12	**62128004**	940	0.82	82%	0.49	0.71	8%	-0.37	10%	-0.39	4%
13	**62108011**	936	0.62	62%	0.39	0.49	17%	-0.30	21%	-0.32	4%
14	**62118005**	941	0.79	79%	0.53	0.75	8%	-0.40	13%	-0.41	4%
15	**62108013**	941	0.71	71%	0.49	0.65	13%	-0.32	16%	-0.43	4%

Performance Tasks

			Score 0		Score 1		Score 2		Score 3		Score 4	
Item	**Item ID**	***N***	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}
16	**62098101**	976	13%	-0.67	11%	-0.29	9%	-0.07	16%	0.11	52%	0.58
17	**62098102**	976	8%	-0.61	7%	-0.37	6%	-0.18	13%	-0.03	66%	0.66
18	**62098103**	976	9%	-0.64	8%	-0.35	8%	-0.18	21%	0.10	54%	0.58
19	**62098104**	976	14%	-0.71	11%	-0.27	10%	-0.06	15%	0.13	50%	0.60
20	**62098105**	976	9%	-0.63	6%	-0.34	7%	-0.14	17%	0.02	61%	0.59
21	**62108101**	976	9%	-0.65	9%	-0.38	9%	-0.10	17%	0.08	55%	0.60
22	**62108102**	976	10%	-0.67	10%	-0.31	12%	-0.05	22%	0.17	46%	0.49
23	**62108103**	976	10%	-0.64	12%	-0.35	12%	-0.04	16%	0.12	48%	0.56
24	**62108104**	976	12%	-0.65	12%	-0.29	11%	0.01	26%	0.22	40%	0.42
25	**62108105**	976	13%	-0.66	12%	-0.28	15%	0.03	26%	0.25	34%	0.40
26	**62118101**	976	9%	-0.67	8%	-0.35	7%	-0.13	12%	-0.05	65%	0.69
27	**62118102**	976	7%	-0.62	7%	-0.40	8%	-0.18	14%	0.01	64%	0.64
28	**62118103**	976	9%	-0.68	8%	-0.34	10%	-0.13	16%	0.03	58%	0.63
29	**62118104**	976	9%	-0.66	8%	-0.39	7%	-0.16	11%	-0.02	65%	0.71
30	**62118105**	976	10%	-0.69	8%	-0.31	9%	-0.06	16%	0.06	57%	0.57

Table 6.3.14
2013 AIMS A Classical Item Analysis
Reading High School

Multiple Choice

					Correct		Distractor 1		Distractor 2		
Item	**Item ID**	***N***	***p*-value**	**%**	r_{pb}	r_{bi}	**%**	r_{pb}	**%**	r_{pb}	**% Omit**
1	**62090013**	940	0.90	90%	0.44	0.75	6%	-0.37	4%	-0.32	4%
2	**62090009**	937	0.81	81%	0.50	0.72	9%	-0.40	10%	-0.38	4%
3	**62100001**	938	0.68	68%	0.41	0.54	13%	-0.23	18%	-0.42	4%
4	**62090003**	934	0.71	71%	0.47	0.63	13%	-0.32	16%	-0.42	4%
5	**62090004**	937	0.72	72%	0.57	0.75	19%	-0.48	9%	-0.36	4%
6	**62110001**	936	0.81	81%	0.37	0.53	7%	-0.31	12%	-0.31	4%
7	**62100008**	940	0.76	76%	0.47	0.64	14%	-0.37	9%	-0.36	4%
8	**62090007**	937	0.78	78%	0.51	0.72	9%	-0.35	13%	-0.43	4%
9	**62090008**	935	0.71	71%	0.57	0.76	13%	-0.41	15%	-0.43	4%
10	**62100010**	938	0.68	68%	0.45	0.59	12%	-0.29	20%	-0.41	4%
11	**62090012**	939	0.69	69%	0.46	0.61	18%	-0.34	13%	-0.39	4%
12	**62090011**	937	0.85	85%	0.50	0.76	9%	-0.44	6%	-0.33	4%
13	**62110002**	939	0.59	59%	0.48	0.60	24%	-0.24	17%	-0.48	4%
14	**62110003**	937	0.61	61%	0.31	0.39	24%	-0.18	15%	-0.36	4%
15	**62110004**	938	0.77	77%	0.47	0.66	7%	-0.27	16%	-0.46	4%

Performance Tasks

			Score 0		**Score 1**		**Score 2**		**Score 3**		**Score 4**	
Item	**Item ID**	***N***	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}
16	**62090101**	977	12%	-0.70	10%	-0.30	10%	-0.09	17%	0.12	51%	0.60
17	**62090102**	977	9%	-0.65	8%	-0.38	6%	-0.16	14%	-0.04	63%	0.71
18	**62090103**	977	9%	-0.69	8%	-0.34	6%	-0.19	11%	-0.05	65%	0.74
19	**62090104**	977	10%	-0.70	7%	-0.38	6%	-0.18	11%	-0.08	66%	0.78
20	**62090105**	977	8%	-0.67	7%	-0.35	6%	-0.20	9%	-0.10	70%	0.76
21	**62100102**	977	13%	-0.71	10%	-0.30	11%	-0.07	15%	0.11	51%	0.64
22	**62100103**	977	11%	-0.71	9%	-0.35	8%	-0.12	13%	0.05	59%	0.69
23	**62100104**	977	11%	-0.69	11%	-0.37	8%	-0.12	12%	0.08	58%	0.69
24	**62100105**	977	12%	-0.70	9%	-0.32	7%	-0.13	12%	0.04	60%	0.69
25	**62110101**	977	11%	-0.71	13%	-0.36	10%	-0.03	11%	0.06	54%	0.67
26	**62110102**	977	11%	-0.71	12%	-0.38	8%	-0.08	11%	0.05	56%	0.72
27	**62110103**	977	12%	-0.70	12%	-0.33	13%	-0.07	14%	0.11	50%	0.64
28	**62110104**	977	14%	-0.69	16%	-0.28	12%	0.05	20%	0.21	39%	0.49
29	**62110105**	977	17%	-0.69	20%	-0.22	13%	0.07	15%	0.22	35%	0.51
30	**62130101**	977	14%	-0.71	13%	-0.32	11%	-0.01	17%	0.16	44%	0.59

Table 6.3.15
2013 AIMS A Classical Item Analysis
Science Grade 4

Multiple Choice

					Correct		Distractor 1		Distractor 2		
Item	**Item ID**	***N***	***p*-value**	**%**	r_{pb}	r_{bi}	**%**	r_{pb}	**%**	r_{pb}	**% Omit**
1	**64124003**	956	0.64	64%	0.35	0.45	21%	-0.25	15%	-0.33	4%
2	**64094016**	957	0.65	65%	0.58	0.74	22%	-0.50	13%	-0.32	4%
3	**64094021**	956	0.76	76%	0.50	0.69	12%	-0.41	11%	-0.36	4%
4	**64094019**	954	0.70	70%	0.46	0.60	18%	-0.42	12%	-0.28	4%
5	**64094022**	956	0.81	81%	0.45	0.65	10%	-0.35	10%	-0.36	4%
6	**64114001**	948	0.55	55%	0.36	0.45	22%	-0.35	23%	-0.22	4%
7	**64114002**	954	0.79	79%	0.47	0.66	10%	-0.35	12%	-0.39	4%
8	**64104007**	952	0.62	62%	0.16	0.20	13%	-0.19	24%	-0.17	4%
9	**64104008**	952	0.65	65%	0.52	0.67	19%	-0.44	17%	-0.33	4%
10	**64094013**	952	0.67	67%	0.43	0.56	15%	-0.27	19%	-0.40	4%
11	**64094003**	951	0.78	78%	0.52	0.73	10%	-0.37	11%	-0.42	4%
12	**64094025**	953	0.76	76%	0.45	0.62	12%	-0.30	12%	-0.41	4%
13	**64124001**	951	0.67	67%	0.43	0.55	13%	-0.25	20%	-0.42	4%
14	**64104009**	951	0.70	70%	0.38	0.50	14%	-0.24	16%	-0.38	4%
15	**64134003**	951	0.67	67%	0.42	0.55	13%	-0.36	20%	-0.32	4%

Performance Tasks

			Score 0		Score 1		Score 2		Score 3		Score 4	
Item	**Item ID**	***N***	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}
16	**64094101**	992	10%	-0.62	12%	-0.33	14%	-0.10	14%	0.08	50%	0.60
17	**64094102**	992	10%	-0.64	17%	-0.30	15%	-0.05	15%	0.12	42%	0.57
18	**64094103**	992	8%	-0.64	13%	-0.36	11%	-0.04	16%	0.06	52%	0.58
19	**64104106**	992	10%	-0.62	19%	-0.30	17%	0.05	23%	0.25	31%	0.39
20	**64104107**	992	11%	-0.65	19%	-0.32	17%	0.09	21%	0.25	32%	0.41
21	**64104101**	992	13%	-0.60	23%	-0.31	15%	0.08	20%	0.23	29%	0.46
22	**64104102**	992	10%	-0.68	14%	-0.37	12%	-0.07	19%	0.13	45%	0.60
23	**64104103**	992	10%	-0.67	13%	-0.34	14%	-0.03	23%	0.25	39%	0.45
24	**64104104**	992	13%	-0.67	19%	-0.25	15%	0.06	20%	0.23	33%	0.44
25	**64104105**	992	11%	-0.68	10%	-0.37	7%	-0.09	12%	0.05	60%	0.67
26	**64114101**	992	10%	-0.66	13%	-0.34	11%	-0.09	16%	0.13	49%	0.59
27	**64114102**	992	10%	-0.66	13%	-0.34	12%	-0.04	21%	0.18	44%	0.52
28	**64114103**	992	12%	-0.68	15%	-0.30	11%	-0.03	20%	0.18	43%	0.54
29	**64114104**	992	9%	-0.65	9%	-0.38	9%	-0.10	13%	0.02	60%	0.65
30	**64114105**	992	10%	-0.64	12%	-0.34	11%	-0.05	17%	0.12	50%	0.55

Table 6.3.16
2013 AIMS A Classical Item Analysis
Science Grade 8

Multiple Choice

					Correct		Distractor 1		Distractor 2		
Item	**Item ID**	***N***	***p*-value**	**%**	r_{pb}	r_{bi}	**%**	r_{pb}	**%**	r_{pb}	**% Omit**
1	**64098010**	945	0.65	65%	0.49	0.63	20%	-0.33	15%	-0.41	3%
2	**64098015**	944	0.76	76%	0.54	0.74	17%	-0.50	7%	-0.30	3%
3	**64098017**	944	0.63	63%	0.47	0.60	13%	-0.32	24%	-0.39	3%
4	**64098019**	941	0.68	68%	0.47	0.62	10%	-0.26	23%	-0.45	4%
5	**64108006**	934	0.45	45%	0.15	0.19	25%	-0.12	30%	-0.19	4%
6	**64108008**	941	0.61	61%	0.43	0.54	21%	-0.34	18%	-0.31	4%
7	**64098009**	940	0.63	63%	0.52	0.66	18%	-0.34	19%	-0.42	4%
8	**64098028**	940	0.63	63%	0.43	0.55	15%	-0.32	23%	-0.34	4%
9	**64108001**	942	0.61	61%	0.39	0.50	20%	-0.21	19%	-0.41	3%
10	**64108002**	941	0.77	77%	0.47	0.66	8%	-0.32	15%	-0.41	4%
11	**64128003**	935	0.48	48%	0.33	0.41	23%	-0.29	29%	-0.22	4%
12	**64098027**	940	0.80	80%	0.44	0.63	8%	-0.28	12%	-0.41	4%
13	**64118001**	940	0.71	71%	0.54	0.71	14%	-0.40	15%	-0.40	4%
14	**64128005**	941	0.79	79%	0.44	0.62	10%	-0.31	11%	-0.38	4%
15	**64118004**	944	0.63	63%	0.47	0.61	17%	-0.25	20%	-0.46	3%

Performance Tasks

			Score 0		Score 1		Score 2		Score 3		Score 4	
Item	**Item ID**	***N***	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}
16	**64098101**	976	6%	-0.64	6%	-0.38	5%	-0.23	8%	-0.09	74%	0.73
17	**64108106**	976	9%	-0.64	12%	-0.28	14%	-0.07	26%	0.20	39%	0.42
18	**64098103**	976	10%	-0.67	10%	-0.32	12%	-0.09	15%	0.06	53%	0.61
19	**64098104**	976	8%	-0.67	6%	-0.36	6%	-0.18	9%	-0.05	72%	0.72
20	**64098105**	976	9%	-0.69	7%	-0.33	6%	-0.15	11%	-0.03	67%	0.70
21	**64108101**	976	11%	-0.62	16%	-0.23	19%	0.09	25%	0.22	29%	0.33
22	**64108102**	976	10%	-0.67	13%	-0.31	17%	0.00	24%	0.21	36%	0.44
23	**64108103**	976	9%	-0.66	10%	-0.34	13%	-0.06	20%	0.12	48%	0.53
24	**64108104**	976	10%	-0.68	12%	-0.32	13%	-0.08	14%	0.11	51%	0.59
25	**64108105**	976	10%	-0.69	8%	-0.33	7%	-0.11	16%	0.07	58%	0.61
26	**64118101**	976	7%	-0.65	7%	-0.36	8%	-0.17	8%	-0.05	70%	0.71
27	**64118102**	976	8%	-0.67	8%	-0.35	10%	-0.15	14%	0.02	60%	0.64
28	**64118103**	976	14%	-0.60	23%	-0.17	23%	0.15	22%	0.29	18%	0.25
29	**64118104**	976	9%	-0.67	8%	-0.36	8%	-0.12	15%	0.04	60%	0.62
30	**64118105**	976	9%	-0.67	10%	-0.33	9%	-0.10	11%	0.04	61%	0.63

Table 6.3.17
2013 AIMS A Classical Item Analysis
Science Grade 10

Multiple Choice

					Correct		Distractor 1		Distractor 2		
Item	**Item ID**	***N***	***p*-value**	**%**	r_{pb}	r_{bi}	**%**	r_{pb}	**%**	r_{pb}	**% Omit**
1	**64090006**	825	0.87	87%	0.47	0.74	5%	-0.24	9%	-0.47	4%
2	**64090007**	822	0.52	52%	0.38	0.47	30%	-0.30	17%	-0.28	4%
3	**64120003**	821	0.59	59%	0.32	0.40	19%	-0.11	21%	-0.41	4%
4	**64090015**	825	0.73	73%	0.48	0.65	11%	-0.27	16%	-0.47	4%
5	**64090017**	824	0.64	64%	0.53	0.68	21%	-0.28	15%	-0.51	4%
6	**64120005**	824	0.52	52%	0.33	0.41	27%	-0.26	21%	-0.27	4%
7	**64090020**	825	0.77	77%	0.53	0.73	12%	-0.35	10%	-0.46	4%
8	**64090023**	823	0.77	77%	0.60	0.83	11%	-0.43	12%	-0.45	4%
9	**64090027**	824	0.74	74%	0.35	0.48	11%	-0.26	14%	-0.33	4%
10	**64100008**	823	0.65	65%	0.46	0.60	13%	-0.47	22%	-0.26	4%
11	**64090009**	825	0.70	70%	0.53	0.69	12%	-0.40	18%	-0.40	4%
12	**64100001**	822	0.47	47%	0.22	0.28	29%	-0.35	24%	-0.04	4%
13	**64110001**	825	0.71	71%	0.55	0.73	17%	-0.43	12%	-0.39	4%
14	**64110002**	825	0.71	71%	0.59	0.78	16%	-0.48	14%	-0.38	4%
15	**64110005**	824	0.75	75%	0.36	0.49	10%	-0.24	15%	-0.36	4%

Performance Tasks

			Score 0		Score 1		Score 2		Score 3		Score 4	
Item	**Item ID**	***N***	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}	**%**	r_{pb}
16	**64090101**	859	10%	-0.69	9%	-0.37	5%	-0.10	11%	0.00	64%	0.71
17	**64090102**	859	9%	-0.65	7%	-0.38	5%	-0.17	8%	-0.06	71%	0.74
18	**64090103**	859	20%	-0.71	13%	-0.21	10%	-0.02	14%	0.18	43%	0.59
19	**64090104**	859	12%	-0.69	12%	-0.26	13%	-0.01	19%	0.16	44%	0.51
20	**64090105**	859	11%	-0.71	12%	-0.33	9%	-0.08	16%	0.11	52%	0.62
21	**64100101**	859	10%	-0.71	8%	-0.34	8%	-0.13	12%	0.02	61%	0.69
22	**64100102**	859	13%	-0.69	14%	-0.32	10%	-0.03	19%	0.16	45%	0.57
23	**64100103**	859	12%	-0.71	10%	-0.31	9%	-0.11	11%	0.04	59%	0.69
24	**64100104**	859	12%	-0.71	10%	-0.33	8%	-0.08	14%	0.10	55%	0.65
25	**64100105**	859	12%	-0.72	10%	-0.31	8%	-0.09	15%	0.08	55%	0.65
26	**64110101**	859	12%	-0.69	15%	-0.24	19%	0.04	26%	0.29	28%	0.37
27	**64110102**	859	13%	-0.69	16%	-0.28	14%	0.03	20%	0.20	37%	0.50
28	**64110103**	859	14%	-0.69	16%	-0.27	12%	0.07	22%	0.29	36%	0.42
29	**64110104**	859	14%	-0.72	14%	-0.30	11%	0.02	14%	0.11	48%	0.61
30	**64110105**	859	14%	-0.73	10%	-0.29	8%	-0.04	11%	0.04	56%	0.68

Part 7: Calibration, Scaling, and Scoring

Part 7 of the Technical Report describes the scaling procedures and results for the 2013 AIMS A assessments. All grade levels and content areas were scaled with calibration samples that typically consisted of the entire student population. Part 7 of this report addresses the following AERA/APA/NCME standards: 1.13, 2.1, 2.2, 2.14, 4.1, 4.2, 4.3, 6.4, 6.5, and 13.6.

7.1 Calibration Methods

Item Response Theory (IRT) models were used in the item calibration for all Reading, Mathematics, and Science AIMS A tests. All tests were calibrated separately by grade and content area. As an added quality control check, all calibration activities were independently conducted by two ADE staff members.

7.1.1 Calibration Models

The AIMS A Mathematics, Reading, and Science criterion-referenced assessments are comprised of multiple-choice items, performance task items. All items contributing to the AIMS A scores were calibrated using the Rasch model to create the scale scores. The Rasch model (Rasch, 1960; Wright, 1977) can be conceptualized as a one-parameter IRT model in which item difficulty and student ability are estimated on the same scale. The Rasch model defines a multiple-choice item in terms of one parameter: item difficulty. In the Rasch model, the probability that a student with an ability estimate (θ) responds correctly to item i is

$$P_i(\theta) = \frac{\exp[(\theta - b_i)]}{1 + \exp[(\theta - b_i)]},$$

where b_i is the difficulty parameter for item i.

7.1.2 Calibration Software

Parameter estimation for items on the tests using the Rasch model was implemented using Winsteps 3.73.0 (Linacre, 2011). Winsteps uses joint maximum likelihood estimation (JMLE) as described by Wright and Masters (1982). Additionally, Lertap 5.7.2 (Larry Nelson, Curtin University of Technology 2010) was utilized to provide classical item and test analysis, and SPSS V17 was used to provide correlations, frequencies and demographic distributions. Finally, Excel 2010 was used to produce final scale scores.

7.2 Calibration Results

7.2.1 IRT Item Statistics

Item statistics resulting from calibration of the AIMS A tests in reading, mathematics, and science are presented in tables 7.2.1.2 through 7.2.1.18. All items for all reading, mathematics, and science tests converged during calibration using typical procedures for Winsteps software. Standard error (SE) of

estimates for the Rasch difficulty measures indicated that the parameters were well estimated. Model to item data fit was monitored using weighted and unweighted mean-square (MSQ) statistics, which indicated the degree of accuracy and predictability with which the data fits the model (Linacre, 2002). In Winsteps and Rasch literature, weighted MSQ is also referred to as infit (IN.MSQ) and unweighted MSQ is referred to as outfit (OUT.MSQ). The IN.MSQ statistic is sensitive to unexpected responses at or near the item's calibrated level, whereas OUT.MSQ statistic is sensitive to unexpected responses away from the item's calibrated level. Typically, values less than 0.6 and greater than 1.4 for IN.MSQ indicate misfit, and values greater than 1.4 for OUT.MSQ indicate misfit (Wright & Linacre, 1994). Fifty-three items were flagged as having misfit as indicated by IN.MSQ and 195 items were flagged as having misfit as indicated by OUT.MSQ. Items on 17 of the 17 tests were flagged for OUT.MSQ while items on 15 of the 17 tests were flagged for IN.MSQ (no items on Grade 3 Reading or Grade 6 Mathematics were flagged). For OUT.MSQ there were between nine and eighteen items flagged per test, where for IN.MSQ the number of items per test flagged for misfit ranged from 1 for Grade 5 Reading to 7 for Grade 10 Reading. It should be noted that the amount of difference between the limits and actual measure was as little as 0.01. The items that were flagged for both IN.MSQ and OUT.MSQ along with low point biserial (PT.BIS) statistics and *p*-values are included in Table 7.2.1.1.

Table 7.2.1.1
Weighted and Unweighted Flagged Items

	Subject	Grade	Item	IN.MSQ	OUT.MSQ	PT. BIS	*p*-value
1	Math	Grade 3	1		1.45		
2	Math	Grade 3	2		3.20		
3	Math	Grade 3	3		1.44		
4	Math	Grade 3	4		2.36		
5	Math	Grade 3	5		1.62		
6	Math	Grade 3	6	1.77	4.15	0.09	
7	Math	Grade 3	8	1.82	6.54	0.04	0.29
8	Math	Grade 3	9		2.29		
9	Math	Grade 3	10		1.47		
10	Math	Grade 3	11	1.44	2.94	0.28	
11	Math	Grade 4	1		1.97		
12	Math	Grade 4	2		1.71		
13	Math	Grade 4	3		2.01		
14	Math	Grade 4	4		2.36		
15	Math	Grade 4	5		1.97		
16	Math	Grade 4	6		1.50		
17	Math	Grade 4	7		2.45		
18	Math	Grade 4	8		1.62		
19	Math	Grade 4	9	1.56	2.72		
20	Math	Grade 4	11		1.52		
21	Math	Grade 4	13	1.60	2.69	0.29	
22	Math	Grade 4	14		1.60		
23	Math	Grade 4	15	1.42	1.91		
24	Math	Grade 5	3		4.94		
25	Math	Grade 5	6		1.44		
26	Math	Grade 5	9		2.20		

27	Math	Grade 5	10	1.43	9.90	0.17
28	Math	Grade 5	11	1.45	5.42	0.12
29	Math	Grade 5	12		5.16	
30	Math	Grade 5	13		2.35	
31	Math	Grade 5	14	1.42	1.95	0.22
32	Math	Grade 5	15	1.42	1.79	0.22
33	Math	Grade 6	1		8.35	
34	Math	Grade 6	3		3.84	
35	Math	Grade 6	4		2.85	0.22
36	Math	Grade 6	7		7.96	
37	Math	Grade 6	8		1.45	
38	Math	Grade 6	10		2.52	
39	Math	Grade 6	12		9.90	0.24
40	Math	Grade 6	13		3.95	
41	Math	Grade 6	14		1.49	
42	Math	Grade 6	15		2.56	
43	Math	Grade 7	1		1.78	
44	Math	Grade 7	2	1.52	2.69	0.26
45	Math	Grade 7	3		1.79	
46	Math	Grade 7	4	1.45	2.58	
47	Math	Grade 7	5		3.07	
48	Math	Grade 7	7		2.08	
49	Math	Grade 7	8		1.45	
50	Math	Grade 7	10	1.49	4.23	0.28
51	Math	Grade 7	11	1.41	2.96	
52	Math	Grade 7	12		1.52	
53	Math	Grade 7	13	1.43		
54	Math	Grade 7	14		3.88	
55	Math	Grade 7	15		2.11	
56	Math	Grade 7	19		0.58	
57	Math	Grade 7	20		0.57	
58	Math	Grade 8	1		1.71	
59	Math	Grade 8	3		2.59	
60	Math	Grade 8	5	1.44	3.12	0.28
61	Math	Grade 8	6	1.49	2.00	0.23
62	Math	Grade 8	7		9.90	0.28
63	Math	Grade 8	11		1.43	
64	Math	Grade 8	12		9.90	
65	Math	Grade 8	13		1.82	
66	Math	Grade 8	14	1.48	1.88	0.22
67	Math	Grade 8	15	1.57	2.93	0.14
68	Math	Grade 10	1		4.12	
69	Math	Grade 10	2		1.47	
70	Math	Grade 10	5		1.64	
71	Math	Grade 10	7	1.55	3.25	0.10
72	Math	Grade 10	8		2.48	
73	Math	Grade 10	9		1.74	
74	Math	Grade 10	11	1.50	2.95	0.19
75	Math	Grade 10	12		1.74	
76	Math	Grade 10	13		5.14	

77	Math	Grade 10	14	1.64	3.51	0.04	
78	Math	Grade 10	15		1.65	0.29	
79	Math	Grade 10	24				0.29
80	Read	Grade 3	2		9.90	0.27	
81	Read	Grade 3	3		2.34		
82	Read	Grade 3	4		1.49		
83	Read	Grade 3	5		1.54		
84	Read	Grade 3	6		2.29		
85	Read	Grade 3	7		1.67		
86	Read	Grade 3	8		2.24		
87	Read	Grade 3	9		6.37	0.22	
88	Read	Grade 3	10		2.04		
89	Read	Grade 3	11		1.41		
90	Read	Grade 3	12		1.46		
91	Read	Grade 3	13		2.48		
92	Read	Grade 3	14		1.73		
93	Read	Grade 3	15		1.67		
94	Read	Grade 4	1		2.97		
95	Read	Grade 4	6		1.63		
96	Read	Grade 4	7		1.66		
97	Read	Grade 4	9	1.41	9.90		
98	Read	Grade 4	10		2.85		
99	Read	Grade 4	11		2.00		
100	Read	Grade 4	12	1.43	9.90		
101	Read	Grade 4	14		1.64		
102	Read	Grade 4	15	1.52	3.44	0.21	
103	Read	Grade 5	2		2.06		
104	Read	Grade 5	3		1.84		
105	Read	Grade 5	4		1.61		
106	Read	Grade 5	5	1.58	7.68		
107	Read	Grade 5	7		1.94		
108	Read	Grade 5	8		1.79		
109	Read	Grade 5	9		5.91		
110	Read	Grade 5	10		2.06		
111	Read	Grade 5	11		1.48		
112	Read	Grade 5	12		2.36		
113	Read	Grade 5	13		1.67		
114	Read	Grade 5	14		1.56		
115	Read	Grade 5	15		2.06		
116	Read	Grade 6	3		1.75		
117	Read	Grade 6	4		1.82		
118	Read	Grade 6	5	1.44	1.85		
119	Read	Grade 6	6		1.55		
120	Read	Grade 6	7		2.03		
121	Read	Grade 6	8		2.06		
122	Read	Grade 6	9		1.97		
123	Read	Grade 6	12		2.83		
124	Read	Grade 6	14		1.54		
125	Read	Grade 6	15	2.01	5.42	0.08	
126	Read	Grade 6	24		0.59		

127	Read	Grade 7	1	1.45	1.52	
128	Read	Grade 7	2	1.74	4.48	0.23
129	Read	Grade 7	3		1.74	
130	Read	Grade 7	4		1.87	
131	Read	Grade 7	5		4.50	
132	Read	Grade 7	7	1.86	7.22	0.13
133	Read	Grade 7	9	1.44	2.24	
134	Read	Grade 7	10		1.41	
135	Read	Grade 7	14	1.53	1.72	
136	Read	Grade 7	26		0.52	
137	Read	Grade 7	29		0.56	
138	Read	Grade 8	3	1.62	2.55	
139	Read	Grade 8	4		1.59	
140	Read	Grade 8	6		1.53	
141	Read	Grade 8	7		1.78	
142	Read	Grade 8	9		1.87	
143	Read	Grade 8	10		1.84	
144	Read	Grade 8	11	1.57	9.61	
145	Read	Grade 8	13		2.17	
146	Read	Grade 8	29		0.59	
147	Read	Grade 10	1		2.86	
148	Read	Grade 10	3	1.56	2.31	
149	Read	Grade 10	4	1.46	1.93	
150	Read	Grade 10	5		1.64	
151	Read	Grade 10	6	1.50	3.44	
152	Read	Grade 10	7		3.46	
153	Read	Grade 10	10	1.45	2.00	
154	Read	Grade 10	11	1.45	3.29	
155	Read	Grade 10	13	1.43	8.52	
156	Read	Grade 10	14	1.91	3.87	
157	Read	Grade 10	15		2.71	
158	Read	Grade 10	17		0.53	
159	Read	Grade 10	18		0.57	
160	Read	Grade 10	19		0.45	
161	Read	Grade 10	20		0.54	
162	Read	Grade 10	22		0.56	
163	Read	Grade 10	25		0.56	
164	Read	Grade 10	26		0.51	
165	Science	Grade 4	1	1.44	2.41	
166	Science	Grade 4	4		2.28	
167	Science	Grade 4	6	1.42	2.05	
168	Science	Grade 4	7		3.15	
169	Science	Grade 4	8	1.79	3.69	0.27
170	Science	Grade 4	9		1.45	
171	Science	Grade 4	12		1.59	
172	Science	Grade 4	13		1.47	
173	Science	Grade 4	14		1.80	
174	Science	Grade 4	15		1.78	
175	Science	Grade 4	22		0.58	
176	Science	Grade 8	1		9.90	

177	Science	Grade 8	3		1.49	
178	Science	Grade 8	4		1.58	
179	Science	Grade 8	5	1.74	5.70	0.22
180	Science	Grade 8	6		1.60	
181	Science	Grade 8	7		1.50	
182	Science	Grade 8	8		1.48	
183	Science	Grade 8	9		1.80	
184	Science	Grade 8	10		1.57	
185	Science	Grade 8	11	1.42	4.90	
186	Science	Grade 8	15		9.90	
187	Science	Grade 10	2	1.44	2.04	
188	Science	Grade 10	3	1.51	8.02	
189	Science	Grade 10	4		1.58	
190	Science	Grade 10	5		1.46	
191	Science	Grade 10	6	1.60	2.54	
192	Science	Grade 10	9	1.43	5.84	
193	Science	Grade 10	10		1.54	
194	Science	Grade 10	12	1.76	3.92	0.28
195	Science	Grade 10	15	1.54	2.16	
196	Science	Grade 10	16		0.59	
197	Science	Grade 10	20		0.59	

Table 7.2.1.2
2013 AIMS A IRT Item Statistics Mathematics Grade 3

Item	Rasch Measure	SE	IN.MSQ	OUT.MSQ	PT. BIS	*p*-value
1	-0.0713	0.0222	1.20	**1.45**	0.46	0.68
2	0.0304	0.0212	1.28	**3.20**	0.40	0.63
3	-0.3250	0.0268	1.07	**1.44**	0.51	0.81
4	0.2297	0.0203	1.23	**2.36**	0.40	0.52
5	0.1968	0.0203	1.20	**1.62**	0.41	0.54
6	0.3986	0.0206	**1.77**	**4.15**	**0.09**	0.41
7	-0.0103	0.0215	1.06	1.03	0.48	0.70
8	0.5956	0.0222	**1.82**	**6.54**	**0.04**	**0.29**
9	0.1603	0.0204	1.19	**2.29**	0.43	0.56
10	0.1445	0.0205	1.30	**1.47**	0.38	0.55
11	0.2708	0.0203	**1.44**	**2.94**	**0.28**	0.49
12	-0.0808	0.0223	1.07	0.92	0.53	0.69
13	-0.0420	0.0219	1.02	0.95	0.53	0.68
14	0.1637	0.0204	1.21	1.33	0.41	0.59
15	-0.3449	0.0273	1.11	1.36	0.55	0.79
16	-0.7116	0.0332	1.10	0.85	0.67	0.80
17	0.5100	0.0277	0.75	0.75	0.54	0.37
18	0.1686	0.0261	0.76	0.76	0.63	0.49
19	0.1831	0.0261	0.67	0.65	0.75	0.49
20	0.2960	0.0264	0.67	0.65	0.70	0.45
21	0.1233	0.0260	0.70	0.68	0.68	0.52
22	0.4304	0.0271	0.69	0.66	0.69	0.40
23	0.2620	0.0263	0.71	0.71	0.68	0.46
24	0.5246	0.0278	0.88	0.87	0.52	0.36
25	0.7051	0.0296	0.83	0.85	0.52	0.32
26	-0.4566	0.0293	0.90	0.79	0.68	0.73
27	0.0874	0.0260	0.80	0.78	0.62	0.53
28	-0.2565	0.0273	0.77	0.71	0.73	0.66
29	-0.0036	0.0261	0.76	0.72	0.67	0.57
30	0.1182	0.0260	0.85	0.85	0.57	0.54

Table 7.2.1.3
2013 AIMS A IRT Item Statistics Mathematics Grade 4

Item	Rasch Measure	SE	IN.MSQ	OUT.MSQ	PT. BIS	*p*-value
1	-0.1215	0.0221	1.15	**1.97**	0.50	0.70
2	0.1541	0.0204	1.27	**1.71**	0.44	0.54
3	-0.3083	0.0250	1.20	**2.01**	0.53	0.77
4	0.2289	0.0204	1.32	**2.36**	0.41	0.50
5	0.1341	0.0204	1.27	**1.97**	0.44	0.56
6	-0.1090	0.0219	1.18	**1.50**	0.49	0.70
7	-0.0824	0.0217	1.40	**2.45**	0.37	0.68
8	0.0163	0.0209	1.15	**1.62**	0.52	0.60
9	0.2640	0.0205	**1.56**	**2.72**	0.31	0.48
10	-0.0300	0.0212	0.97	0.88	0.58	0.65
11	0.1368	0.0204	1.11	**1.52**	0.51	0.60
12	-0.3610	0.0261	1.01	1.16	0.58	0.79
13	0.2573	0.0205	**1.60**	**2.69**	**0.29**	0.48
14	-0.0061	0.0210	1.12	**1.60**	0.52	0.64
15	0.2473	0.0204	**1.42**	**1.91**	0.38	0.49
16	-0.7623	0.0330	1.03	0.77	0.68	0.81
17	-0.6832	0.0316	0.84	0.67	0.69	0.79
18	0.0090	0.0256	0.68	0.68	0.73	0.55
19	0.2535	0.0259	0.62	0.61	0.73	0.46
20	0.3063	0.0261	0.64	0.63	0.74	0.43
21	-0.5035	0.0289	0.81	0.74	0.71	0.74
22	0.4526	0.0270	0.62	0.60	0.68	0.39
23	0.6038	0.0282	0.69	0.66	0.68	0.34
24	0.5269	0.0276	0.69	0.64	0.68	0.37
25	0.7141	0.0294	0.78	0.80	0.60	0.33
26	-0.1370	0.0259	0.85	0.88	0.62	0.61
27	0.0224	0.0256	0.92	0.93	0.59	0.55
28	-0.0452	0.0257	0.94	0.92	0.62	0.58
29	-0.3560	0.0273	0.86	0.91	0.57	0.70
30	-0.6300	0.0307	0.94	0.80	0.66	0.77

Table 7.2.1.4
2013 AIMS A IRT Item Statistics Mathematics Grade 5

Item	Rasch Measure	SE	IN.MSQ	OUT.MSQ	PT. BIS	*p*-value
1	0.0398	0.0200	1.10	1.19	0.45	0.60
2	-0.3393	0.0256	1.23	1.31	0.52	0.77
3	-0.1822	0.0226	1.21	**4.94**	0.44	0.73
4	-0.2093	0.0230	1.02	0.91	0.56	0.72
5	0.0815	0.0197	1.25	1.39	0.36	0.56
6	0.2468	0.0193	1.14	**1.44**	0.37	0.46
7	-0.2571	0.0239	1.26	1.26	0.45	0.75
8	0.3233	0.0195	1.15	1.38	0.35	0.40
9	0.2379	0.0193	1.26	**2.20**	0.30	0.46
10	0.3385	0.0195	**1.43**	**9.90**	**0.17**	0.39
11	0.3600	0.0196	**1.45**	**5.42**	**0.12**	0.38
12	0.0334	0.0200	1.06	**5.16**	0.47	0.60
13	0.1925	0.0193	1.10	**2.35**	0.41	0.49
14	0.2066	0.0193	**1.42**	**1.95**	**0.22**	0.49
15	0.2275	0.0193	**1.42**	**1.79**	**0.22**	0.47
16	-0.1951	0.0263	0.74	0.71	0.72	0.62
17	0.0013	0.0255	0.81	0.78	0.64	0.54
18	-0.1370	0.0260	0.75	0.73	0.63	0.60
19	0.0540	0.0255	0.81	0.81	0.50	0.53
20	0.3752	0.0263	0.75	0.74	0.57	0.41
21	-0.4426	0.0285	0.70	0.65	0.73	0.74
22	-0.6547	0.0315	0.89	0.75	0.72	0.77
23	0.4849	0.0271	0.75	0.73	0.54	0.35
24	-0.4459	0.0285	0.83	0.79	0.68	0.71
25	-0.3003	0.0271	0.80	0.79	0.62	0.66
26	-0.0414	0.0256	0.81	0.79	0.58	0.57
27	-0.4249	0.0283	0.80	0.74	0.72	0.70
28	0.0593	0.0254	0.83	0.81	0.56	0.52
29	-0.6567	0.0315	0.96	0.83	0.69	0.77
30	-0.1289	0.0260	0.71	0.69	0.66	0.59

Table 7.2.1.5
2013 AIMS A IRT Item Statistics Mathematics Grade 6

Item	Rasch Measure	SE	IN.MSQ	OUT.MSQ	PT. BIS	*p*-value
1	0.1722	0.0197	1.10	**8.35**	0.42	0.54
2	0.1997	0.0196	1.14	1.36	0.39	0.48
3	-0.1015	0.0220	1.29	**3.84**	0.38	0.70
4	0.3880	0.0199	1.37	**2.85**	**0.22**	0.38
5	-0.1505	0.0227	1.17	1.26	0.50	0.69
6	0.1059	0.0200	1.09	1.22	0.45	0.58
7	0.1548	0.0197	1.29	**7.96**	0.32	0.54
8	0.2104	0.0196	1.03	**1.45**	0.45	0.50
9	-0.2039	0.0236	1.00	1.27	0.51	0.76
10	0.2609	0.0196	1.26	**2.52**	0.31	0.47
11	0.1595	0.0197	1.13	1.34	0.41	0.54
12	0.2119	0.0196	1.39	**9.90**	**0.24**	0.50
13	-0.1049	0.0220	1.30	**3.95**	0.43	0.66
14	0.0997	0.0200	1.16	**1.49**	0.40	0.58
15	0.1517	0.0197	1.23	**2.56**	0.35	0.54
16	-0.6677	0.0324	0.83	0.72	0.73	0.78
17	-0.7118	0.0332	0.85	0.72	0.69	0.79
18	-0.5095	0.0299	0.81	0.73	0.68	0.75
19	-0.4618	0.0293	0.74	0.69	0.73	0.72
20	-0.4280	0.0289	0.70	0.63	0.77	0.72
21	-0.4515	0.0292	0.80	0.75	0.67	0.72
22	-0.4195	0.0288	0.89	0.79	0.75	0.71
23	0.3933	0.0266	0.77	0.77	0.51	0.39
24	0.3937	0.0266	0.67	0.66	0.61	0.40
25	-0.2497	0.0272	0.79	0.77	0.63	0.65
26	0.0577	0.0258	0.85	0.85	0.47	0.53
27	0.0104	0.0259	0.85	0.84	0.54	0.55
28	0.3271	0.0262	0.92	0.91	0.43	0.46
29	-0.1555	0.0265	0.87	0.84	0.62	0.61
30	0.3392	0.0263	0.86	0.83	0.50	0.42

Table 7.2.1.6
2013 AIMS A IRT Item Statistics Mathematics Grade 7

Item	Rasch Measure	SE	IN.MSQ	OUT.MSQ	PT. BIS	*p*-value
1	0.1446	0.0201	1.30	**1.78**	0.40	0.60
2	0.3050	0.0196	**1.52**	**2.69**	**0.26**	0.50
3	0.1739	0.0200	1.16	**1.79**	0.48	0.55
4	0.2625	0.0197	**1.45**	**2.58**	0.32	0.50
5	0.3529	0.0197	1.30	**3.07**	0.37	0.47
6	0.1001	0.0204	1.18	1.40	0.47	0.63
7	0.1259	0.0203	1.19	**2.08**	0.45	0.64
8	0.2179	0.0198	1.21	**1.45**	0.44	0.56
9	-0.1502	0.0233	1.02	0.77	0.57	0.76
10	0.3745	0.0197	**1.49**	**4.23**	**0.28**	0.46
11	0.2458	0.0197	**1.41**	**2.96**	0.34	0.55
12	0.0369	0.0209	1.07	**1.52**	0.53	0.67
13	-0.4519	0.0303	**1.43**	0.99	0.50	0.84
14	0.1691	0.0200	1.15	**3.88**	0.47	0.60
15	0.2195	0.0198	1.35	**2.11**	0.37	0.56
16	-0.6765	0.0325	0.77	0.61	0.73	0.81
17	-0.6494	0.0320	0.85	0.78	0.64	0.80
18	-0.5240	0.0300	0.81	0.70	0.69	0.77
19	-0.2354	0.0267	0.63	**0.58**	0.74	0.68
20	-0.4557	0.0290	0.67	**0.57**	0.76	0.77
21	0.6195	0.0265	0.70	0.73	0.56	0.36
22	0.3929	0.0252	0.75	0.72	0.65	0.44
23	0.3865	0.0252	0.63	0.61	0.68	0.44
24	0.5196	0.0258	0.75	0.71	0.63	0.40
25	0.1728	0.0249	0.75	0.72	0.72	0.53
26	-0.3507	0.0278	0.80	0.77	0.67	0.72
27	-0.2497	0.0268	0.78	0.76	0.67	0.69
28	-0.1114	0.0258	0.73	0.75	0.68	0.65
29	-0.4377	0.0288	0.83	0.74	0.69	0.75
30	-0.0513	0.0254	0.63	0.62	0.70	0.63

Table 7.2.1.7
2013 AIMS A IRT Item Statistics Mathematics Grade 8

Item	Rasch Measure	SE	IN.MSQ	OUT.MSQ	PT. BIS	*p*-value
1	0.1276	0.0198	1.17	**1.71**	0.43	0.58
2	-0.1220	0.0221	1.09	1.06	0.50	0.72
3	0.1604	0.0197	1.24	**2.59**	0.38	0.56
4	0.1134	0.0199	1.21	1.31	0.41	0.59
5	0.1059	0.0199	**1.44**	**3.12**	**0.28**	0.56
6	0.2923	0.0195	**1.49**	**2.00**	**0.23**	0.47
7	0.2758	0.0195	1.37	**9.90**	**0.28**	0.45
8	-0.0069	0.0208	0.96	0.84	0.56	0.66
9	-0.2118	0.0236	0.96	0.75	0.55	0.77
10	0.1512	0.0197	1.02	1.16	0.50	0.57
11	0.1493	0.0197	1.17	**1.43**	0.42	0.57
12	0.2526	0.0195	1.20	**9.90**	0.38	0.50
13	0.2055	0.0196	1.22	**1.82**	0.38	0.54
14	0.3469	0.0196	**1.48**	**1.88**	**0.22**	0.43
15	0.4243	0.0200	**1.57**	**2.93**	**0.14**	0.38
16	-0.5298	0.0297	0.69	0.60	0.73	0.76
17	-0.7241	0.0332	0.88	0.73	0.65	0.81
18	-0.5423	0.0299	0.78	0.67	0.73	0.76
19	-0.3862	0.0278	0.79	0.71	0.68	0.71
20	-0.5959	0.0308	0.85	0.69	0.70	0.79
21	0.3731	0.0256	0.74	0.72	0.65	0.42
22	0.3325	0.0254	0.77	0.75	0.66	0.45
23	0.4022	0.0258	0.68	0.67	0.64	0.41
24	0.4223	0.0259	0.63	0.61	0.68	0.40
25	0.3108	0.0254	0.71	0.68	0.69	0.44
26	-0.1888	0.0260	0.82	0.80	0.59	0.64
27	-0.1875	0.0260	0.75	0.70	0.67	0.64
28	0.0523	0.0250	0.79	0.80	0.55	0.55
29	-0.4086	0.0281	0.74	0.66	0.70	0.74
30	-0.3110	0.0270	0.79	0.74	0.65	0.69

Table 7.2.1.8
2013 AIMS A IRT Item Statistics Mathematics High School

Item	Rasch Measure	SE	IN.MSQ	OUT.MSQ	PT. BIS	*p*-value
1	0.2017	0.0195	1.30	**4.12**	0.34	0.52
2	0.0893	0.0200	1.22	**1.47**	0.39	0.61
3	0.0499	0.0202	1.11	1.16	0.46	0.62
4	-0.0158	0.0208	1.06	1.16	0.50	0.66
5	0.1728	0.0196	1.16	**1.64**	0.41	0.54
6	0.1209	0.0198	1.10	1.19	0.47	0.55
7	0.5241	0.0205	**1.55**	**3.25**	**0.10**	0.31
8	-0.0869	0.0216	0.98	**2.48**	0.59	0.67
9	-0.2503	0.0243	1.32	**1.74**	0.42	0.75
10	0.1061	0.0199	1.13	1.22	0.44	0.59
11	0.3329	0.0195	**1.50**	**2.95**	**0.19**	0.43
12	0.2090	0.0195	1.28	**1.74**	0.34	0.53
13	0.2395	0.0194	1.25	**5.14**	0.35	0.50
14	0.5309	0.0206	**1.64**	**3.51**	**0.04**	0.31
15	0.2295	0.0194	1.37	**1.65**	**0.29**	0.50
16	-0.5111	0.0293	0.82	0.74	0.69	0.75
17	-0.3188	0.0269	0.76	0.70	0.73	0.69
18	-0.2031	0.0259	0.73	0.68	0.76	0.66
19	-0.6974	0.0326	0.94	0.79	0.65	0.80
20	-0.5129	0.0293	0.93	0.80	0.69	0.75
21	0.4468	0.0258	0.68	0.66	0.60	0.38
22	0.5991	0.0271	0.63	0.61	0.62	0.32
23	0.6242	0.0273	0.67	0.62	0.63	0.31
24	0.6745	0.0279	0.66	0.61	0.60	**0.29**
25	-0.0601	0.0251	0.71	0.69	0.64	0.59
26	-0.0444	0.0250	0.76	0.75	0.61	0.58
27	0.2825	0.0249	0.83	0.81	0.62	0.48
28	-0.0034	0.0249	0.71	0.69	0.71	0.56
29	0.1363	0.0247	0.79	0.76	0.67	0.52
30	0.1881	0.0247	0.79	0.77	0.61	0.48

Table 7.2.1.9
2013 AIMS A IRT Item Statistics Reading Grade 3

Item	Rasch Measure	SE	IN.MSQ	OUT.MSQ	PT. BIS	*p*-value
1	-0.2542	0.0248	1.09	1.02	0.54	0.77
2	0.4193	0.0203	1.23	**9.90**	**0.27**	0.35
3	0.3918	0.0201	1.18	**2.34**	0.35	0.42
4	-0.0199	0.0211	1.25	**1.49**	0.41	0.63
5	0.0232	0.0207	1.35	**1.54**	0.37	0.57
6	0.1059	0.0201	1.19	**2.29**	0.38	0.60
7	0.1284	0.0199	1.06	**1.67**	0.46	0.55
8	0.0436	0.0205	1.36	**2.24**	0.32	0.61
9	0.4644	0.0206	1.32	**6.37**	**0.22**	0.32
10	0.1806	0.0198	1.25	**2.04**	0.34	0.48
11	0.0795	0.0202	1.26	**1.41**	0.37	0.56
12	0.2548	0.0197	1.20	**1.46**	0.36	0.46
13	0.2641	0.0197	1.15	**2.48**	0.37	0.46
14	0.2569	0.0197	1.17	**1.73**	0.36	0.46
15	-0.0184	0.0211	1.24	**1.67**	0.41	0.64
16	-0.3459	0.0277	0.89	0.83	0.67	0.69
17	-0.5988	0.0313	0.86	0.72	0.75	0.77
18	0.4759	0.0264	0.72	0.73	0.53	0.36
19	0.1117	0.0250	0.69	0.67	0.58	0.51
20	0.0000	0.0252	0.74	0.71	0.62	0.56
21	-0.1976	0.0263	0.79	0.76	0.67	0.64
22	-0.4546	0.0291	0.74	0.68	0.70	0.73
23	-0.4546	0.0291	0.77	0.70	0.72	0.73
24	-0.4648	0.0292	0.79	0.73	0.68	0.73
25	0.0464	0.0251	0.79	0.77	0.57	0.59
26	-0.3059	0.0273	0.75	0.81	0.64	0.68
27	0.0324	0.0252	0.75	0.76	0.56	0.54
28	-0.2969	0.0272	0.74	0.70	0.66	0.67
29	-0.6644	0.0325	0.86	0.68	0.74	0.80
30	-0.6512	0.0322	0.87	0.67	0.77	0.78

Table 7.2.1.10
2013 AIMS A IRT Item Statistics Reading Grade 4

Item	Rasch Measure	SE	IN.MSQ	OUT.MSQ	PT. BIS	*p*-value
1	-0.2245	0.0260	1.08	**2.97**	0.57	0.81
2	0.0773	0.0212	1.17	1.21	0.51	0.63
3	0.1281	0.0208	1.07	1.16	0.51	0.66
4	0.1852	0.0204	1.11	1.33	0.49	0.60
5	0.1099	0.0209	1.14	1.25	0.50	0.63
6	0.0602	0.0214	1.29	**1.63**	0.47	0.63
7	0.0492	0.0215	1.35	**1.66**	0.39	0.68
8	0.2311	0.0201	1.23	1.27	0.43	0.57
9	0.3804	0.0198	**1.41**	**9.90**	0.30	0.48
10	0.3031	0.0199	1.37	**2.85**	0.34	0.53
11	0.4647	0.0200	1.25	**2.00**	0.38	0.45
12	0.0998	0.0210	**1.43**	**9.90**	0.34	0.65
13	0.0748	0.0212	1.12	1.17	0.51	0.66
14	0.3756	0.0198	1.25	**1.64**	0.39	0.48
15	0.5095	0.0202	**1.52**	**3.44**	**0.21**	0.40
16	0.0299	0.0259	0.77	0.77	0.61	0.60
17	-0.0830	0.0266	0.73	0.71	0.68	0.64
18	-0.0802	0.0266	0.66	0.65	0.72	0.64
19	-0.4179	0.0300	0.72	0.66	0.69	0.75
20	-0.2372	0.0279	0.72	0.66	0.73	0.70
21	-0.3541	0.0292	0.76	0.70	0.72	0.73
22	0.0453	0.0259	0.74	0.74	0.63	0.59
23	-0.2791	0.0283	0.77	0.74	0.73	0.70
24	-0.4099	0.0299	0.79	0.68	0.75	0.74
25	-0.3384	0.0290	0.80	0.77	0.70	0.73
26	-0.4333	0.0302	0.80	0.68	0.76	0.75
27	0.0703	0.0258	0.73	0.70	0.67	0.59
28	-0.0979	0.0267	0.74	0.70	0.72	0.64
29	-0.1029	0.0267	0.82	0.80	0.64	0.65
30	0.0206	0.0260	0.87	0.88	0.62	0.61

Table 7.2.1.11
2013 AIMS A IRT Item Statistics Reading Grade 5

Item	Rasch Measure	SE	IN.MSQ	OUT.MSQ	PT. BIS	*p*-value
1	-0.0792	0.0236	1.21	1.31	0.50	0.74
2	0.0933	0.0216	1.31	**2.06**	0.43	0.65
3	0.0486	0.0220	1.17	**1.84**	0.50	0.67
4	0.1290	0.0214	1.28	**1.61**	0.44	0.62
5	0.1156	0.0215	**1.58**	**7.68**	0.30	0.64
6	-0.0167	0.0228	1.11	1.09	0.54	0.71
7	0.2052	0.0209	1.38	**1.94**	0.38	0.58
8	0.0926	0.0216	1.07	**1.79**	0.52	0.68
9	0.0801	0.0217	1.02	**5.91**	0.56	0.66
10	0.4214	0.0207	1.29	**2.06**	0.39	0.45
11	0.2297	0.0208	1.06	**1.48**	0.52	0.58
12	0.2017	0.0209	1.28	**2.36**	0.42	0.59
13	0.0072	0.0225	1.24	**1.67**	0.49	0.67
14	0.1429	0.0213	1.18	**1.56**	0.48	0.62
15	0.3359	0.0206	1.36	**2.06**	0.37	0.51
16	-0.5101	0.0325	0.81	0.70	0.74	0.76
17	-0.4486	0.0315	0.73	0.67	0.76	0.76
18	-0.1707	0.0282	0.74	0.71	0.68	0.68
19	-0.4505	0.0316	0.77	0.67	0.76	0.76
20	-0.5677	0.0335	0.92	0.73	0.76	0.78
21	-0.3300	0.0299	0.75	0.69	0.75	0.72
22	-0.1432	0.0279	0.75	0.81	0.62	0.67
23	-0.2190	0.0286	0.79	0.91	0.57	0.69
24	-0.5296	0.0328	0.85	0.75	0.72	0.78
25	-0.0737	0.0274	0.69	0.69	0.66	0.64
26	-0.3150	0.0297	0.79	0.71	0.73	0.72
27	-0.1385	0.0279	0.71	0.70	0.69	0.66
28	-0.2289	0.0287	0.74	0.71	0.72	0.69
29	-0.0757	0.0274	0.69	0.68	0.69	0.65
30	-0.4486	0.0315	0.81	0.69	0.75	0.76

Table 7.2.1.12
2013 AIMS A IRT Item Statistics Reading Grade 6

Item	Rasch Measure	SE	IN.MSQ	OUT.MSQ	PT. BIS	*p*-value
1	-0.1796	0.0244	1.21	1.36	0.51	0.75
2	-0.0818	0.0232	1.11	1.12	0.54	0.71
3	0.0438	0.0220	1.26	**1.75**	0.46	0.64
4	-0.0330	0.0227	1.28	**1.82**	0.46	0.68
5	-0.0218	0.0226	**1.44**	**1.85**	0.39	0.67
6	-0.0738	0.0231	1.19	**1.55**	0.51	0.70
7	0.0201	0.0222	1.31	**2.03**	0.45	0.65
8	-0.1751	0.0244	1.04	**2.06**	0.59	0.74
9	0.3416	0.0213	1.35	**1.97**	0.39	0.47
10	-0.1667	0.0243	1.20	1.20	0.54	0.72
11	-0.0742	0.0231	1.14	0.95	0.55	0.69
12	0.0360	0.0221	1.31	**2.83**	0.44	0.64
13	0.0860	0.0218	1.22	1.38	0.47	0.62
14	0.1384	0.0215	1.27	**1.54**	0.45	0.59
15	0.5413	0.0221	**2.01**	**5.42**	**0.08**	0.35
16	0.1410	0.0262	0.80	0.80	0.60	0.57
17	-0.3740	0.0298	0.76	0.67	0.75	0.73
18	-0.3705	0.0297	0.76	0.72	0.69	0.73
19	-0.3512	0.0295	0.70	0.66	0.71	0.72
20	-0.2817	0.0287	0.75	0.76	0.65	0.70
21	-0.1811	0.0278	0.79	0.88	0.58	0.66
22	-0.4173	0.0303	0.77	0.74	0.71	0.74
23	-0.2418	0.0284	0.66	0.69	0.66	0.68
24	-0.4183	0.0303	0.67	**0.59**	0.81	0.74
25	-0.2694	0.0286	0.72	0.67	0.70	0.72
26	-0.4386	0.0306	0.76	0.64	0.77	0.75
27	-0.4256	0.0304	0.70	0.62	0.78	0.74
28	-0.3391	0.0294	0.70	0.62	0.76	0.72
29	-0.5163	0.0317	0.83	0.67	0.77	0.77
30	-0.4164	0.0303	0.77	0.64	0.79	0.74

Table 7.2.1.13
2013 AIMS A IRT Item Statistics Reading Grade 7

Item	Rasch Measure	SE	IN.MSQ	OUT.MSQ	PT. BIS	*p*-value
1	-0.1523	0.0251	**1.45**	**1.52**	0.48	0.77
2	0.5028	0.0210	**1.74**	**4.48**	**0.23**	0.44
3	0.1457	0.0221	1.26	**1.74**	0.51	0.64
4	-0.1004	0.0244	1.33	**1.87**	0.49	0.76
5	0.2400	0.0215	1.13	**4.50**	0.52	0.59
6	-0.1621	0.0253	0.95	0.72	0.65	0.78
7	0.6777	0.0216	**1.86**	**7.22**	**0.13**	0.35
8	0.0338	0.0230	1.07	1.08	0.59	0.72
9	0.2530	0.0215	**1.44**	**2.24**	0.43	0.58
10	-0.0771	0.0242	1.26	**1.41**	0.54	0.74
11	-0.1383	0.0249	1.14	0.99	0.60	0.75
12	-0.0314	0.0236	1.12	1.01	0.59	0.72
13	-0.3134	0.0279	1.30	1.12	0.58	0.81
14	0.0124	0.0232	**1.53**	**1.72**	0.43	0.70
15	-0.3392	0.0284	1.15	0.68	0.60	0.83
16	-0.2402	0.0282	0.72	0.68	0.75	0.72
17	-0.1489	0.0273	0.72	0.69	0.73	0.69
18	-0.5081	0.0317	0.73	0.66	0.78	0.79
19	-0.5388	0.0322	0.72	0.60	0.76	0.80
20	-0.3715	0.0297	0.75	0.69	0.77	0.74
21	-0.0472	0.0265	0.72	0.76	0.64	0.66
22	-0.3171	0.0290	0.68	0.66	0.74	0.74
23	-0.3781	0.0298	0.69	0.65	0.77	0.76
24	-0.6674	0.0346	0.95	0.70	0.76	0.81
25	-0.3956	0.0301	0.71	0.69	0.78	0.76
26	-0.5284	0.0321	0.67	**0.52**	0.79	0.80
27	-0.2477	0.0283	0.71	0.70	0.71	0.72
28	-0.3592	0.0296	0.71	0.69	0.76	0.75
29	-0.4475	0.0308	0.68	**0.56**	0.79	0.78
30	-0.2805	0.0286	0.66	0.63	0.76	0.73

Table 7.2.1.14
2013 AIMS A IRT Item Statistics Reading Grade 8

Item	Rasch Measure	SE	IN.MSQ	OUT.MSQ	PT. BIS	*p*-value
1	0.2946	0.0216	1.11	1.21	0.54	0.59
2	-0.4565	0.0346	1.29	0.77	0.58	0.87
3	0.4349	0.0214	**1.62**	**2.55**	0.33	0.51
4	0.1992	0.0221	1.27	**1.59**	0.49	0.64
5	-0.3552	0.0314	1.29	1.24	0.59	0.84
6	0.2739	0.0217	1.18	**1.53**	0.52	0.60
7	0.2493	0.0218	1.20	**1.78**	0.51	0.61
8	0.1575	0.0224	1.18	1.14	0.53	0.68
9	0.1414	0.0225	1.37	**1.87**	0.46	0.67
10	0.2695	0.0217	1.14	**1.84**	0.52	0.62
11	0.3706	0.0215	**1.57**	**9.61**	0.34	0.55
12	-0.1238	0.0260	1.15	0.95	0.56	0.79
13	0.3116	0.0216	1.32	**2.17**	0.45	0.60
14	-0.1193	0.0260	1.12	0.81	0.61	0.76
15	0.1043	0.0229	1.28	1.32	0.50	0.69
16	-0.1463	0.0286	0.76	0.71	0.75	0.71
17	-0.5056	0.0339	0.84	0.66	0.73	0.81
18	-0.3157	0.0307	0.74	0.69	0.72	0.76
19	-0.0731	0.0279	0.71	0.62	0.77	0.69
20	-0.4307	0.0325	0.86	0.84	0.68	0.79
21	-0.2816	0.0302	0.77	0.74	0.72	0.75
22	-0.0561	0.0277	0.72	0.72	0.68	0.71
23	-0.1148	0.0283	0.72	0.66	0.72	0.70
24	-0.0340	0.0275	0.87	0.97	0.60	0.68
25	0.0210	0.0271	0.79	0.89	0.63	0.64
26	-0.4244	0.0324	0.79	0.62	0.76	0.79
27	-0.4774	0.0334	0.80	0.73	0.71	0.80
28	-0.3254	0.0309	0.71	0.63	0.75	0.76
29	-0.4608	0.0331	0.81	**0.59**	0.78	0.79
30	-0.3010	0.0305	0.80	0.75	0.71	0.76

Table 7.2.1.15
2013 AIMS A IRT Item Statistics Reading High School

Item	Rasch Measure	SE	IN.MSQ	OUT.MSQ	PT. BIS	*p*-value
1	-0.4284	0.0338	1.14	**2.86**	0.59	0.87
2	-0.1831	0.0279	1.30	1.09	0.60	0.78
3	0.1810	0.0238	**1.56**	**2.31**	0.46	0.66
4	0.0188	0.0251	**1.46**	**1.93**	0.55	0.68
5	0.0351	0.0249	1.28	**1.64**	0.59	0.69
6	-0.1062	0.0267	**1.50**	**3.44**	0.49	0.77
7	-0.0115	0.0254	1.37	**3.46**	0.54	0.74
8	-0.0717	0.0262	1.25	1.28	0.60	0.75
9	0.0766	0.0246	1.15	1.17	0.62	0.68
10	0.1810	0.0238	**1.45**	**2.00**	0.50	0.66
11	0.1513	0.0240	**1.45**	**3.29**	0.51	0.67
12	-0.2024	0.0283	1.02	1.05	0.63	0.82
13	0.3721	0.0232	**1.43**	**8.52**	0.51	0.57
14	0.3333	0.0233	**1.91**	**3.87**	0.34	0.58
15	-0.0192	0.0255	1.31	**2.71**	0.56	0.74
16	-0.1657	0.0296	0.67	0.77	0.79	0.72
17	-0.3896	0.0323	0.66	**0.53**	0.79	0.79
18	-0.4441	0.0331	0.71	**0.57**	0.80	0.79
19	-0.4662	0.0335	0.64	**0.45**	0.85	0.79
20	-0.5552	0.0350	0.75	**0.54**	0.80	0.81
21	-0.0371	0.0285	0.72	0.70	0.77	0.70
22	-0.2066	0.0300	0.65	**0.56**	0.80	0.75
23	-0.2439	0.0304	0.66	0.61	0.82	0.74
24	-0.2919	0.0310	0.76	0.66	0.78	0.75
25	-0.1553	0.0295	0.64	**0.56**	0.81	0.71
26	-0.1994	0.0299	0.62	**0.51**	0.84	0.72
27	-0.0938	0.0290	0.65	0.61	0.79	0.69
28	0.2349	0.0273	0.84	0.87	0.69	0.64
29	0.2512	0.0273	0.80	0.83	0.69	0.58
30	-0.0013	0.0283	0.64	0.62	0.79	0.66

Table 7.2.1.16
2013 AIMS A IRT Item Statistics Science Grade 4

Item	Rasch Measure	SE	IN.MSQ	OUT.MSQ	PT. BIS	*p*-value
1	0.2368	0.0216	**1.44**	**2.41**	0.41	0.62
2	0.2144	0.0217	1.02	1.16	0.59	0.63
3	-0.0395	0.0241	1.16	1.20	0.56	0.74
4	0.1187	0.0223	1.24	**2.28**	0.50	0.67
5	-0.1068	0.0252	1.14	0.97	0.55	0.78
6	0.4154	0.0211	**1.42**	**2.05**	0.41	0.53
7	-0.0529	0.0243	1.12	**3.15**	0.56	0.76
8	0.2664	0.0214	**1.79**	**3.69**	**0.27**	0.60
9	0.2275	0.0216	1.10	**1.45**	0.55	0.62
10	0.1918	0.0218	1.24	1.36	0.50	0.64
11	-0.0411	0.0242	1.00	0.75	0.61	0.75
12	0.0013	0.0236	1.24	**1.59**	0.52	0.73
13	0.1937	0.0218	1.30	**1.47**	0.47	0.64
14	0.1238	0.0223	1.32	**1.80**	0.47	0.68
15	0.1918	0.0218	1.26	**1.78**	0.49	0.64
16	-0.1902	0.0287	0.77	0.70	0.72	0.71
17	-0.0660	0.0277	0.74	0.69	0.72	0.66
18	-0.2587	0.0293	0.79	0.69	0.71	0.73
19	0.0838	0.0269	0.80	0.81	0.61	0.62
20	0.0712	0.0270	0.79	0.78	0.64	0.61
21	0.1684	0.0267	0.78	0.76	0.65	0.58
22	-0.1684	0.0285	0.64	**0.58**	0.78	0.69
23	-0.1165	0.0281	0.76	0.81	0.68	0.67
24	0.0893	0.0269	0.86	0.87	0.63	0.61
25	-0.3810	0.0308	0.88	0.73	0.76	0.75
26	-0.2662	0.0294	0.81	0.75	0.75	0.70
27	-0.1603	0.0284	0.73	0.67	0.73	0.69
28	-0.0899	0.0279	0.81	0.77	0.71	0.67
29	-0.4274	0.0314	0.82	0.71	0.77	0.76
30	-0.2431	0.0292	0.80	0.73	0.72	0.71

Table 7.2.1.17
2013 AIMS A IRT Item Statistics Science Grade 8

Item	Rasch Measure	SE	IN.MSQ	OUT.MSQ	PT. BIS	*p*-value
1	0.3737	0.0218	1.17	**9.90**	0.52	0.63
2	0.0464	0.0257	1.26	1.27	0.60	0.74
3	0.4132	0.0216	1.21	**1.49**	0.50	0.61
4	0.3930	0.0217	1.15	**1.58**	0.51	0.65
5	0.7179	0.0211	**1.74**	**5.70**	**0.22**	0.43
6	0.4519	0.0214	1.30	**1.60**	0.46	0.59
7	0.5058	0.0212	1.04	**1.50**	0.56	0.60
8	0.4206	0.0215	1.27	**1.48**	0.48	0.60
9	0.4464	0.0214	1.39	**1.80**	0.42	0.59
10	0.1350	0.0243	1.21	**1.57**	0.54	0.75
11	0.6667	0.0210	**1.42**	**4.90**	0.36	0.46
12	0.0646	0.0254	1.24	1.18	0.54	0.77
13	0.2669	0.0227	1.01	1.14	0.60	0.68
14	0.0784	0.0252	1.22	1.09	0.54	0.77
15	0.3870	0.0217	1.26	**9.90**	0.49	0.61
16	-0.5975	0.0381	0.89	0.62	0.75	0.84
17	0.0266	0.0281	0.73	0.73	0.65	0.69
18	-0.1016	0.0295	0.72	0.63	0.76	0.73
19	-0.5874	0.0378	1.04	0.73	0.74	0.83
20	-0.3789	0.0336	0.84	0.62	0.77	0.80
21	0.2577	0.0266	0.86	0.89	0.54	0.61
22	0.1025	0.0275	0.69	0.72	0.66	0.66
23	-0.0674	0.0291	0.74	0.67	0.70	0.72
24	-0.0826	0.0292	0.75	0.69	0.75	0.71
25	-0.2411	0.0313	0.85	0.77	0.73	0.76
26	-0.4553	0.0350	0.89	0.69	0.75	0.81
27	-0.2684	0.0317	0.76	0.63	0.76	0.77
28	0.4897	0.0260	0.81	0.84	0.52	0.52
29	-0.2785	0.0319	0.78	0.65	0.74	0.78
30	-0.1948	0.0306	0.81	0.70	0.73	0.76

Table 7.2.1.18
2013 AIMS A IRT Item Statistics Science Grade 10

Item	Rasch Measure	SE	IN.MSQ	OUT.MSQ	PT. BIS	*p*-value
1	-0.3573	0.0324	1.12	0.73	0.61	0.83
2	0.3946	0.0228	**1.44**	**2.04**	0.41	0.50
3	0.2740	0.0232	**1.51**	**8.02**	0.38	0.57
4	0.0323	0.0252	1.26	**1.58**	0.54	0.70
5	0.1791	0.0238	1.16	**1.46**	0.57	0.62
6	0.4050	0.0228	**1.60**	**2.54**	0.35	0.50
7	-0.1661	0.0281	1.26	1.14	0.60	0.75
8	-0.0789	0.0267	0.94	0.75	0.67	0.74
9	-0.0157	0.0258	**1.43**	**5.84**	0.48	0.71
10	0.1889	0.0237	1.26	**1.54**	0.53	0.63
11	0.0829	0.0246	1.17	1.40	0.57	0.67
12	0.4902	0.0228	**1.76**	**3.92**	**0.28**	0.45
13	0.0143	0.0254	1.19	1.14	0.59	0.68
14	0.0372	0.0251	1.04	1.03	0.64	0.68
15	-0.0264	0.0259	**1.54**	**2.16**	0.45	0.72
16	-0.4635	0.0340	0.78	**0.59**	0.78	0.78
17	-0.6490	0.0376	0.89	0.63	0.77	0.81
18	0.0295	0.0284	0.69	0.62	0.79	0.62
19	-0.1342	0.0297	0.75	0.75	0.70	0.68
20	-0.2727	0.0312	0.67	**0.59**	0.78	0.72
21	-0.4400	0.0336	0.72	0.60	0.79	0.77
22	-0.1324	0.0296	0.70	0.62	0.75	0.68
23	-0.3387	0.0321	0.73	0.61	0.79	0.74
24	-0.2845	0.0313	0.72	0.61	0.78	0.72
25	-0.3103	0.0317	0.72	0.66	0.78	0.73
26	0.0686	0.0281	0.67	0.78	0.66	0.61
27	-0.0313	0.0288	0.70	0.67	0.71	0.63
28	0.0962	0.0280	0.82	0.85	0.65	0.62
29	-0.1254	0.0296	0.71	0.64	0.77	0.67
30	-0.2611	0.0311	0.76	0.63	0.79	0.72

7.3 Scaling Methods

A raw score to scale score table was determined for each of the Spring 2013 AIMS A Reading, Mathematics, and Science tests. The scale of measurement was determined for each test using spring 2009 operational test results and cut scores from the subsequent standard setting. The desired AIMS A scales for Grades 3-8 and High School ranged from 1000 to 1500. AIMS A scales are not on a vertical scale as are the general assessment AIMS scales. Each grade has its own unique scale within the 1000-1500 range. The scale scores for different grades cannot be compared.

7.4 Scoring and Standard Error of Measurement

Item response theory makes available number-correct scoring. Number-correct scoring was used to derive scales scores for the AIMS A tests. With number-correct scoring, a student's number-correct score (or raw score) is converted to a scale score through the use of transformation constants. These constants were calculated for each test and each grade. A direct linear transformation was then applied in Excel to transform the logit value generated in the score file provided by Winsteps to the necessary scale score. The formula utilized for calculating the M1 and M2 values was as follows:

M1 = Desired SD/Logit SD M2 = Desired Mean/(Logit Mean * M1)

Figure 7.4.1
AIMS A Transformation Constants Established 2009

Math	M1	M2
4	71.42857142857140	1252
3	78.12500000000000	1255
5	75.75757575757580	1256
6	119.04761904761900	1246
7	108.69565217391300	1252
8	104.16666666666700	1252
10	113.63636363636400	1252

Reading	M1	M2
3	96.15384615384610	1247
4	108.69565217391300	1240
5	131.57894736842100	1240
6	138.88888888888900	1248
7	131.57894736842100	1249
8	100.00000000000000	1246
10	100.00000000000000	1251

Science	M1	M2
4	100.00000000000000	1240
8	83.33333333333330	1235
10	75.75757575757580	1245

The desired mean for all tests was set to 1250 with a standard deviation of 25. With that information, all transformation constants were calculated.

Typically, a test score is obtained from a single observation of behavior and represents an estimate of the trait being measured. As an estimate, an observed test score contains some measurement error and does not perfectly reflect an individual's true score. The degree of measurement error in a test score can be estimated using a statistic called the standard error of measurement (*SEM*).

A student's exact true score cannot be known. The true score is defined as the average test score that would result if the test could be administered repeatedly without the effects of practice or fatigue. The standard error of measurement is an estimate of the standard deviation of an individual's observed scores from these repeated administrations. For practical purposes, this statistic can be used to obtain a range within which a student's true score is likely to fall. Using item response theory, the standard error of measurement can be calculated for every possible scale score.

Tables 7.4.2 through 7.4.18 present raw score to scale score conversion tables and IRT conditional *SEM* for all AIMS A tests.

Table 7.4.2
2013 AIMS A Raw Score to Scale Score Mathematics Grade 3

Raw Score	Scale Score	*SEM*	Raw Score	Scale Score	*SEM*
0	1000	320	61	1263	8
1	1025	72	62	1264	8
2	1075	51	63	1264	8
3	1105	41	64	1265	8
4	1125	35	65	1266	8
5	1141	31	66	1267	8
6	1152	27	67	1268	8
7	1162	25	68	1269	8
8	1170	22	69	1270	8
9	1176	21	70	1271	8
10	1182	19	71	1272	8
11	1186	18	72	1273	9
12	1190	17	73	1274	9
13	1194	16	74	1275	9
14	1198	15	75	1276	9
15	1201	14	76	1278	9
16	1203	14	77	1279	9
17	1206	13	78	1280	9
18	1208	13	79	1281	9
19	1211	12	80	1282	9
20	1213	12	81	1283	9
21	1215	12	82	1284	9
22	1217	12	83	1285	9
23	1219	11	84	1286	9
24	1220	11	85	1288	9
25	1222	11	86	1289	9
26	1224	11	87	1290	10
27	1225	10	88	1292	10
28	1227	10	89	1293	10
29	1228	10	90	1294	10
30	1229	10	91	1296	10
31	1231	10	92	1297	10
32	1232	10	93	1299	10
33	1233	10	94	1300	11
34	1235	9	95	1302	11
35	1236	9	96	1303	11
36	1237	9	97	1305	11
37	1238	9	98	1307	11
38	1239	9	99	1309	12
39	1240	9	100	1311	12
40	1242	9	101	1313	12
41	1243	9	102	1315	13
42	1244	9	103	1317	13
43	1245	9	104	1319	13
44	1246	9	105	1322	14
45	1247	9	106	1325	14
46	1248	9	107	1328	15
47	1249	9	108	1331	15
48	1250	8	109	1334	16
49	1251	8	110	1338	17
50	1252	8	111	1343	18
51	1253	8	112	1347	19
52	1254	8	113	1353	21
53	1255	8	114	1360	23
54	1256	8	115	1368	25
55	1257	8	116	1378	29
56	1258	8	117	1391	34
57	1259	8	118	1412	43
58	1260	8	119	1450	65
59	1261	8	120	1500	318
60	1262	8			

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 7.4.3
2013 AIMS A Raw Score to Scale Score Mathematics Grade 4

Raw Score	Scale Score	*SEM*	Raw Score	Scale Score	*SEM*
0	1000	350	61	1259	9
1	1000	79	62	1260	9
2	1053	56	63	1261	9
3	1085	45	64	1262	9
4	1107	38	65	1263	9
5	1124	34	66	1264	9
6	1137	30	67	1265	9
7	1147	27	68	1266	9
8	1155	25	69	1268	9
9	1163	23	70	1269	9
10	1169	21	71	1270	9
11	1174	20	72	1271	9
12	1179	19	73	1272	9
13	1183	18	74	1273	9
14	1187	17	75	1274	9
15	1190	16	76	1275	9
16	1194	16	77	1276	9
17	1197	15	78	1277	9
18	1199	14	79	1278	10
19	1202	14	80	1280	10
20	1204	14	81	1281	10
21	1207	13	82	1282	10
22	1209	13	83	1283	10
23	1211	13	84	1285	10
24	1213	12	85	1286	10
25	1215	12	86	1287	10
26	1216	12	87	1288	10
27	1218	11	88	1290	10
28	1220	11	89	1291	11
29	1221	11	90	1293	11
30	1223	11	91	1294	11
31	1225	11	92	1296	11
32	1226	11	93	1297	11
33	1227	10	94	1299	11
34	1229	10	95	1301	12
35	1230	10	96	1302	12
36	1231	10	97	1304	12
37	1233	10	98	1306	12
38	1234	10	99	1308	13
39	1235	10	100	1310	13
40	1236	10	101	1313	13
41	1238	10	102	1315	14
42	1239	10	103	1317	14
43	1240	10	104	1320	15
44	1241	9	105	1323	15
45	1242	9	106	1326	16
46	1243	9	107	1329	16
47	1245	9	108	1333	17
48	1246	9	109	1336	18
49	1247	9	110	1341	19
50	1248	9	111	1345	20
51	1249	9	112	1351	21
52	1250	9	113	1357	23
53	1251	9	114	1364	25
54	1252	9	115	1372	27
55	1253	9	116	1383	31
56	1254	9	117	1397	36
57	1255	9	118	1419	46
58	1256	9	119	1459	70
59	1257	9	120	1500	347
60	1258	9			

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 7.4.4
2013 AIMS A Raw Score to Scale Score Mathematics Grade 5

Raw Score	Scale Score	*SEM*	Raw Score	Scale Score	*SEM*
0	1000	339	61	1259	9
1	1001	76	62	1260	9
2	1053	54	63	1261	9
3	1084	43	64	1262	9
4	1105	37	65	1263	9
5	1121	33	66	1264	9
6	1133	29	67	1265	9
7	1144	27	68	1266	9
8	1152	24	69	1267	9
9	1160	23	70	1268	9
10	1166	21	71	1269	9
11	1172	20	72	1270	9
12	1176	19	73	1271	9
13	1181	18	74	1272	9
14	1185	17	75	1273	9
15	1189	16	76	1274	9
16	1192	16	77	1275	9
17	1195	15	78	1276	9
18	1198	14	79	1277	9
19	1201	14	80	1278	9
20	1203	14	81	1280	9
21	1205	13	82	1281	9
22	1208	13	83	1282	9
23	1210	13	84	1283	9
24	1212	12	85	1284	9
25	1214	12	86	1285	9
26	1216	12	87	1286	10
27	1217	12	88	1288	10
28	1219	11	89	1289	10
29	1221	11	90	1290	10
30	1222	11	91	1291	10
31	1224	11	92	1293	10
32	1225	11	93	1294	10
33	1227	10	94	1296	10
34	1228	10	95	1297	11
35	1230	10	96	1299	11
36	1231	10	97	1300	11
37	1232	10	98	1302	11
38	1234	10	99	1303	12
39	1235	10	100	1305	12
40	1236	10	101	1307	12
41	1237	10	102	1309	12
42	1239	10	103	1311	13
43	1240	9	104	1313	13
44	1241	9	105	1316	14
45	1242	9	106	1318	14
46	1243	9	107	1321	15
47	1244	9	108	1324	16
48	1245	9	109	1328	16
49	1247	9	110	1331	17
50	1248	9	111	1335	18
51	1249	9	112	1340	20
52	1250	9	113	1346	22
53	1251	9	114	1353	24
54	1252	9	115	1361	27
55	1253	9	116	1372	31
56	1254	9	117	1386	37
57	1255	9	118	1409	47
58	1256	9	119	1452	71
59	1257	9	120	1500	338
60	1258	9			

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 7.4.5
2013 AIMS A Raw Score to Scale Score Mathematics Grade 6

Raw Score	Scale Score	*SEM*	Raw Score	Scale Score	*SEM*
0	1000	532	61	1252	13
1	1000	119	62	1254	13
2	1000	84	63	1255	13
3	1000	68	64	1257	13
4	1006	58	65	1258	13
5	1031	51	66	1260	13
6	1051	46	67	1261	13
7	1067	42	68	1263	13
8	1081	39	69	1264	13
9	1093	36	70	1266	14
10	1103	34	71	1267	14
11	1112	32	72	1269	14
12	1120	30	73	1270	14
13	1127	29	74	1272	14
14	1134	27	75	1273	14
15	1140	26	76	1275	14
16	1145	25	77	1277	14
17	1150	24	78	1278	14
18	1155	23	79	1280	14
19	1160	23	80	1282	14
20	1164	22	81	1283	14
21	1168	21	82	1285	14
22	1171	21	83	1287	14
23	1175	20	84	1288	15
24	1178	20	85	1290	15
25	1181	19	86	1292	15
26	1184	19	87	1294	15
27	1187	18	88	1296	15
28	1190	18	89	1298	15
29	1193	18	90	1300	15
30	1195	17	91	1302	16
31	1198	17	92	1304	16
32	1200	17	93	1306	16
33	1202	17	94	1308	16
34	1205	16	95	1311	17
35	1207	16	96	1313	17
36	1209	16	97	1315	17
37	1211	16	98	1318	18
38	1213	15	99	1321	18
39	1215	15	100	1324	19
40	1217	15	101	1327	19
41	1219	15	102	1330	20
42	1221	15	103	1333	20
43	1223	15	104	1337	21
44	1224	15	105	1340	22
45	1226	14	106	1345	23
46	1228	14	107	1349	24
47	1230	14	108	1354	25
48	1231	14	109	1359	26
49	1233	14	110	1365	27
50	1235	14	111	1372	29
51	1236	14	112	1380	31
52	1238	14	113	1389	34
53	1240	14	114	1399	37
54	1241	14	115	1412	42
55	1243	14	116	1429	48
56	1244	14	117	1452	57
57	1246	14	118	1487	73
58	1247	14	119	1500	110
59	1249	14	120	1500	530
60	1250	13			

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 7.4.6
2013 AIMS A Raw Score to Scale Score Mathematics Grade 7

Raw Score	Scale Score	*SEM*	Raw Score	Scale Score	*SEM*
0	1000	486	61	1263	12
1	1000	109	62	1264	12
2	1000	77	63	1266	12
3	1010	62	64	1267	12
4	1040	53	65	1269	12
5	1063	47	66	1270	12
6	1081	42	67	1271	12
7	1096	38	68	1273	12
8	1108	35	69	1274	12
9	1119	32	70	1276	12
10	1128	30	71	1277	12
11	1135	28	72	1278	12
12	1142	27	73	1280	12
13	1149	26	74	1281	13
14	1155	24	75	1283	13
15	1160	23	76	1284	13
16	1165	22	77	1286	13
17	1169	22	78	1287	13
18	1173	21	79	1289	13
19	1177	20	80	1290	13
20	1181	20	81	1292	13
21	1184	19	82	1293	13
22	1188	19	83	1295	13
23	1191	18	84	1296	13
24	1194	18	85	1298	13
25	1197	18	86	1300	14
26	1200	17	87	1301	14
27	1202	17	88	1303	14
28	1205	17	89	1305	14
29	1207	16	90	1307	14
30	1210	16	91	1309	14
31	1212	16	92	1311	15
32	1214	16	93	1313	15
33	1216	15	94	1315	15
34	1219	15	95	1317	15
35	1221	15	96	1319	16
36	1223	15	97	1321	16
37	1225	15	98	1324	16
38	1226	14	99	1326	17
39	1228	14	100	1329	17
40	1230	14	101	1331	18
41	1232	14	102	1334	18
42	1234	14	103	1337	19
43	1235	14	104	1341	19
44	1237	14	105	1344	20
45	1239	13	106	1348	21
46	1240	13	107	1352	21
47	1242	13	108	1356	22
48	1244	13	109	1361	24
49	1245	13	110	1367	25
50	1247	13	111	1373	27
51	1248	13	112	1380	28
52	1250	13	113	1388	31
53	1251	13	114	1397	34
54	1253	13	115	1409	38
55	1254	13	116	1424	43
56	1256	13	117	1444	51
57	1257	13	118	1475	66
58	1259	12	119	1500	100
59	1260	12	120	1500	484
60	1262	12			

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 7.4.7
2013 AIMS A Raw Score to Scale Score Mathematics Grade 8

Raw Score	Scale Score	*SEM*	Raw Score	Scale Score	*SEM*
0	1000	466	61	1262	12
1	1000	105	62	1263	12
2	1000	74	63	1265	12
3	1019	60	64	1266	12
4	1049	51	65	1267	12
5	1071	45	66	1269	12
6	1088	40	67	1270	12
7	1103	37	68	1271	12
8	1115	34	69	1273	12
9	1125	31	70	1274	12
10	1133	29	71	1275	12
11	1141	28	72	1277	12
12	1148	26	73	1278	12
13	1154	25	74	1279	12
14	1160	24	75	1281	12
15	1165	23	76	1282	12
16	1170	22	77	1283	12
17	1174	21	78	1285	12
18	1178	20	79	1286	12
19	1182	20	80	1288	12
20	1185	19	81	1289	12
21	1189	18	82	1291	12
22	1192	18	83	1292	13
23	1195	17	84	1294	13
24	1198	17	85	1295	13
25	1201	17	86	1297	13
26	1203	16	87	1298	13
27	1206	16	88	1300	13
28	1208	16	89	1302	13
29	1210	15	90	1303	13
30	1213	15	91	1305	14
31	1215	15	92	1307	14
32	1217	15	93	1309	14
33	1219	14	94	1311	14
34	1221	14	95	1313	15
35	1223	14	96	1315	15
36	1225	14	97	1317	15
37	1226	14	98	1319	15
38	1228	13	99	1321	16
39	1230	13	100	1324	16
40	1232	13	101	1326	17
41	1233	13	102	1329	17
42	1235	13	103	1332	17
43	1236	13	104	1335	18
44	1238	13	105	1338	19
45	1240	13	106	1342	19
46	1241	13	107	1345	20
47	1243	12	108	1349	21
48	1244	12	109	1354	22
49	1246	12	110	1359	23
50	1247	12	111	1364	25
51	1248	12	112	1371	27
52	1250	12	113	1378	29
53	1251	12	114	1387	32
54	1253	12	115	1398	35
55	1254	12	116	1412	41
56	1255	12	117	1431	49
57	1257	12	118	1460	63
58	1258	12	119	1500	95
59	1259	12	120	1500	464
60	1261	12			

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 7.4.8
2013 AIMS A Raw Score to Scale Score Mathematics High School

Raw Score	Scale Score	*SEM*	Raw Score	Scale Score	*SEM*
0	1000	508	61	1270	13
1	1000	114	62	1271	13
2	1000	80	63	1273	13
3	1021	65	64	1274	13
4	1052	55	65	1276	13
5	1075	48	66	1277	13
6	1093	43	67	1279	13
7	1108	39	68	1280	13
8	1120	35	69	1282	13
9	1130	33	70	1283	13
10	1139	31	71	1285	13
11	1147	29	72	1286	13
12	1153	27	73	1288	13
13	1160	26	74	1289	13
14	1165	25	75	1291	13
15	1170	24	76	1292	13
16	1175	23	77	1294	13
17	1179	22	78	1296	14
18	1183	21	79	1297	14
19	1187	20	80	1299	14
20	1191	20	81	1301	14
21	1194	19	82	1302	14
22	1197	19	83	1304	14
23	1200	18	84	1306	14
24	1203	18	85	1308	14
25	1206	17	86	1309	15
26	1208	17	87	1311	15
27	1211	17	88	1313	15
28	1213	16	89	1315	15
29	1216	16	90	1317	15
30	1218	16	91	1319	15
31	1220	16	92	1321	16
32	1222	15	93	1324	16
33	1224	15	94	1326	16
34	1226	15	95	1328	16
35	1228	15	96	1331	17
36	1230	15	97	1333	17
37	1232	15	98	1336	17
38	1234	14	99	1338	18
39	1236	14	100	1341	18
40	1237	14	101	1344	19
41	1239	14	102	1347	19
42	1241	14	103	1351	20
43	1242	14	104	1354	20
44	1244	14	105	1358	21
45	1246	14	106	1362	22
46	1247	13	107	1367	23
47	1249	13	108	1371	24
48	1250	13	109	1376	25
49	1252	13	110	1382	26
50	1254	13	111	1389	28
51	1255	13	112	1396	30
52	1257	13	113	1404	32
53	1258	13	114	1414	35
54	1260	13	115	1426	39
55	1261	13	116	1442	45
56	1263	13	117	1462	53
57	1264	13	118	1494	68
58	1265	13	119	1500	103
59	1267	13	120	1500	505
60	1268	13			

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 7.4.9
2013 AIMS A Raw Score to Scale Score Reading Grade 3

Raw Score	Scale Score	*SEM*	Raw Score	Scale Score	*SEM*
0	1000	430	61	1251	11
1	1000	96	62	1253	11
2	1000	67	63	1254	11
3	1036	54	64	1255	11
4	1061	46	65	1256	11
5	1080	40	66	1257	11
6	1095	36	67	1259	11
7	1107	33	68	1260	11
8	1118	30	69	1261	11
9	1126	28	70	1262	11
10	1134	26	71	1264	11
11	1141	25	72	1265	11
12	1147	23	73	1266	11
13	1152	22	74	1267	11
14	1157	21	75	1269	11
15	1162	20	76	1270	11
16	1166	20	77	1271	11
17	1170	19	78	1272	11
18	1173	18	79	1274	11
19	1177	18	80	1275	11
20	1180	17	81	1276	11
21	1183	17	82	1278	11
22	1186	16	83	1279	11
23	1189	16	84	1280	12
24	1191	16	85	1282	12
25	1194	15	86	1283	12
26	1196	15	87	1285	12
27	1199	15	88	1286	12
28	1201	15	89	1288	12
29	1203	14	90	1289	12
30	1205	14	91	1291	12
31	1207	14	92	1292	12
32	1209	14	93	1294	13
33	1211	13	94	1296	13
34	1213	13	95	1297	13
35	1214	13	96	1299	13
36	1216	13	97	1301	13
37	1218	13	98	1303	14
38	1220	13	99	1305	14
39	1221	12	100	1307	14
40	1223	12	101	1309	15
41	1224	12	102	1312	15
42	1226	12	103	1314	15
43	1227	12	104	1316	16
44	1229	12	105	1319	16
45	1230	12	106	1322	17
46	1232	12	107	1325	18
47	1233	12	108	1329	18
48	1234	12	109	1332	19
49	1236	11	110	1336	20
50	1237	11	111	1341	22
51	1239	11	112	1346	23
52	1240	11	113	1352	25
53	1241	11	114	1360	28
54	1242	11	115	1369	31
55	1244	11	116	1380	36
56	1245	11	117	1397	44
57	1246	11	118	1422	57
58	1248	11	119	1473	87
59	1249	11	120	1500	428
60	1250	11			

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 7.4.10
2013 AIMS A Raw Score to Scale Score Reading Grade 4

Raw Score	Scale Score	*SEM*	Raw Score	Scale Score	*SEM*
0	1000	486	61	1250	12
1	1000	109	62	1252	12
2	1000	77	63	1253	12
3	1000	62	64	1254	12
4	1029	53	65	1256	12
5	1052	47	66	1257	12
6	1070	42	67	1259	12
7	1085	38	68	1260	12
8	1097	35	69	1261	12
9	1108	33	70	1263	12
10	1117	31	71	1264	12
11	1125	29	72	1265	12
12	1132	27	73	1267	12
13	1139	26	74	1268	12
14	1145	25	75	1270	12
15	1150	24	76	1271	12
16	1155	23	77	1272	12
17	1159	22	78	1274	13
18	1164	21	79	1275	13
19	1167	20	80	1277	13
20	1171	20	81	1278	13
21	1175	19	82	1280	13
22	1178	19	83	1281	13
23	1181	18	84	1283	13
24	1184	18	85	1284	13
25	1187	17	86	1286	13
26	1189	17	87	1288	13
27	1192	17	88	1289	14
28	1195	16	89	1291	14
29	1197	16	90	1293	14
30	1199	16	91	1295	14
31	1201	15	92	1296	14
32	1204	15	93	1298	14
33	1206	15	94	1300	15
34	1208	15	95	1302	15
35	1210	15	96	1304	15
36	1212	14	97	1306	15
37	1214	14	98	1309	16
38	1215	14	99	1311	16
39	1217	14	100	1313	16
40	1219	14	101	1316	17
41	1221	14	102	1318	17
42	1222	13	103	1321	18
43	1224	13	104	1324	18
44	1226	13	105	1327	19
45	1227	13	106	1331	20
46	1229	13	107	1334	20
47	1230	13	108	1338	21
48	1232	13	109	1343	22
49	1233	13	110	1347	24
50	1235	13	111	1353	25
51	1236	13	112	1359	27
52	1238	13	113	1367	29
53	1239	13	114	1375	33
54	1241	12	115	1386	37
55	1242	12	116	1401	43
56	1243	12	117	1421	52
57	1245	12	118	1453	67
58	1246	12	119	1500	102
59	1248	12	120	1500	485
60	1249	12			

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 7.4.11
2013 AIMS A Raw Score to Scale Score Reading Grade 5

Raw Score	Scale Score	*SEM*	Raw Score	Scale Score	*SEM*
0	1000	588	61	1241	15
1	1000	131	62	1243	15
2	1000	91	63	1244	15
3	1000	73	64	1246	15
4	1000	63	65	1248	15
5	1003	55	66	1249	15
6	1024	49	67	1251	15
7	1041	45	68	1253	15
8	1055	42	69	1254	15
9	1067	39	70	1256	15
10	1078	36	71	1257	15
11	1087	34	72	1259	15
12	1096	33	73	1261	15
13	1103	31	74	1262	15
14	1110	30	75	1264	15
15	1117	29	76	1266	15
16	1123	28	77	1267	15
17	1128	27	78	1269	15
18	1134	26	79	1271	15
19	1138	25	80	1272	15
20	1143	24	81	1274	15
21	1147	24	82	1276	15
22	1151	23	83	1278	15
23	1155	22	84	1280	16
24	1159	22	85	1281	16
25	1163	21	86	1283	16
26	1166	21	87	1285	16
27	1169	21	88	1287	16
28	1172	20	89	1289	16
29	1175	20	90	1291	16
30	1178	19	91	1293	17
31	1181	19	92	1295	17
32	1184	19	93	1297	17
33	1186	18	94	1300	17
34	1189	18	95	1302	18
35	1191	18	96	1304	18
36	1194	18	97	1307	18
37	1196	17	98	1310	19
38	1199	17	99	1312	19
39	1201	17	100	1315	19
40	1203	17	101	1318	20
41	1205	17	102	1321	20
42	1207	16	103	1324	21
43	1209	16	104	1328	22
44	1211	16	105	1332	22
45	1213	16	106	1335	23
46	1215	16	107	1340	24
47	1217	16	108	1344	25
48	1219	16	109	1350	27
49	1221	16	110	1355	28
50	1222	15	111	1362	30
51	1224	15	112	1369	33
52	1226	15	113	1378	35
53	1228	15	114	1389	39
54	1229	15	115	1402	44
55	1231	15	116	1420	52
56	1233	15	117	1444	63
57	1235	15	118	1484	83
58	1236	15	119	1500	125
59	1238	15	120	1500	587
60	1240	15			

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 7.4.12
2013 AIMS A Raw Score to Scale Score Reading Grade 6

Raw Score	Scale Score	*SEM*	Raw Score	Scale Score	*SEM*
0	1000	621	61	1237	15
1	1000	137	62	1238	15
2	1000	95	63	1240	15
3	1000	76	64	1242	15
4	1000	64	65	1243	15
5	1005	56	66	1245	15
6	1025	50	67	1247	15
7	1042	46	68	1249	15
8	1055	42	69	1250	15
9	1067	39	70	1252	16
10	1078	37	71	1254	16
11	1087	35	72	1255	16
12	1095	33	73	1257	16
13	1102	31	74	1259	16
14	1109	30	75	1261	16
15	1115	29	76	1263	16
16	1121	28	77	1264	16
17	1126	27	78	1266	16
18	1131	26	79	1268	16
19	1136	25	80	1270	16
20	1140	24	81	1272	16
21	1144	24	82	1274	16
22	1148	23	83	1276	17
23	1152	22	84	1278	17
24	1155	22	85	1280	17
25	1159	21	86	1282	17
26	1162	21	87	1284	17
27	1165	21	88	1286	17
28	1168	20	89	1288	18
29	1171	20	90	1291	18
30	1174	20	91	1293	18
31	1176	19	92	1295	18
32	1179	19	93	1298	19
33	1182	19	94	1300	19
34	1184	18	95	1303	19
35	1187	18	96	1306	19
36	1189	18	97	1308	20
37	1191	18	98	1311	20
38	1193	18	99	1314	21
39	1196	17	100	1317	21
40	1198	17	101	1321	22
41	1200	17	102	1324	22
42	1202	17	103	1328	23
43	1204	17	104	1332	23
44	1206	17	105	1336	24
45	1208	16	106	1340	25
46	1210	16	107	1345	26
47	1212	16	108	1350	27
48	1214	16	109	1355	29
49	1215	16	110	1362	30
50	1217	16	111	1369	32
51	1219	16	112	1377	34
52	1221	16	113	1386	37
53	1223	16	114	1397	41
54	1224	16	115	1411	46
55	1226	16	116	1429	54
56	1228	16	117	1454	66
57	1230	16	118	1495	86
58	1231	15	119	1500	131
59	1233	15	120	1500	620
60	1235	15			

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 7.4.13
2013 AIMS A Raw Score to Scale Score Reading Grade 7

Raw Score	Scale Score	*SEM*	Raw Score	Scale Score	*SEM*
0	1000	588	61	1235	15
1	1000	129	62	1237	15
2	1000	89	63	1238	15
3	1000	71	64	1240	15
4	1002	59	65	1242	15
5	1025	52	66	1244	15
6	1043	46	67	1245	15
7	1058	42	68	1247	15
8	1070	38	69	1249	15
9	1080	36	70	1250	15
10	1089	33	71	1252	15
11	1097	32	72	1254	15
12	1104	30	73	1256	15
13	1111	28	74	1257	15
14	1117	27	75	1259	15
15	1122	26	76	1261	15
16	1127	25	77	1263	16
17	1132	24	78	1265	16
18	1136	24	79	1267	16
19	1140	23	80	1268	16
20	1144	22	81	1270	16
21	1148	22	82	1272	16
22	1151	21	83	1274	16
23	1155	21	84	1276	16
24	1158	20	85	1278	16
25	1161	20	86	1280	17
26	1164	20	87	1282	17
27	1167	19	88	1285	17
28	1170	19	89	1287	17
29	1172	19	90	1289	17
30	1175	18	91	1291	17
31	1177	18	92	1294	18
32	1180	18	93	1296	18
33	1182	18	94	1299	18
34	1184	17	95	1301	18
35	1187	17	96	1304	19
36	1189	17	97	1306	19
37	1191	17	98	1309	19
38	1193	17	99	1312	20
39	1195	16	100	1315	20
40	1197	16	101	1318	21
41	1199	16	102	1322	21
42	1201	16	103	1325	22
43	1203	16	104	1329	22
44	1205	16	105	1333	23
45	1207	16	106	1337	24
46	1209	16	107	1341	24
47	1211	16	108	1346	25
48	1212	15	109	1351	26
49	1214	15	110	1356	28
50	1216	15	111	1363	29
51	1218	15	112	1369	31
52	1220	15	113	1377	34
53	1221	15	114	1387	37
54	1223	15	115	1398	41
55	1225	15	116	1413	47
56	1227	15	117	1434	57
57	1228	15	118	1467	76
58	1230	15	119	1500	120
59	1232	15	120	1500	587
60	1233	15			

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 7.4.14
2013 AIMS A Raw Score to Scale Score Reading Grade 8

Raw Score	Scale Score	*SEM*	Raw Score	Scale Score	*SEM*
0	1000	447	61	1246	12
1	1000	98	62	1248	12
2	1005	68	63	1249	12
3	1041	54	64	1250	11
4	1066	45	65	1252	11
5	1083	39	66	1253	11
6	1097	35	67	1254	11
7	1108	32	68	1256	11
8	1118	29	69	1257	11
9	1126	27	70	1258	11
10	1132	25	71	1260	11
11	1139	24	72	1261	11
12	1144	23	73	1262	11
13	1149	22	74	1264	12
14	1153	21	75	1265	12
15	1157	20	76	1266	12
16	1161	19	77	1268	12
17	1165	19	78	1269	12
18	1168	18	79	1270	12
19	1171	18	80	1272	12
20	1174	17	81	1273	12
21	1177	17	82	1274	12
22	1180	16	83	1276	12
23	1182	16	84	1277	12
24	1185	16	85	1279	12
25	1187	15	86	1280	12
26	1190	15	87	1282	12
27	1192	15	88	1283	12
28	1194	15	89	1285	12
29	1196	14	90	1286	13
30	1198	14	91	1288	13
31	1200	14	92	1289	13
32	1202	14	93	1291	13
33	1204	14	94	1293	13
34	1206	14	95	1295	13
35	1208	13	96	1296	14
36	1209	13	97	1298	14
37	1211	13	98	1300	14
38	1213	13	99	1302	14
39	1214	13	100	1304	15
40	1216	13	101	1307	15
41	1218	13	102	1309	15
42	1219	13	103	1311	16
43	1221	12	104	1314	16
44	1222	12	105	1317	17
45	1224	12	106	1319	17
46	1225	12	107	1323	18
47	1227	12	108	1326	19
48	1228	12	109	1330	20
49	1230	12	110	1334	21
50	1231	12	111	1338	22
51	1233	12	112	1344	24
52	1234	12	113	1350	26
53	1236	12	114	1357	28
54	1237	12	115	1366	32
55	1238	12	116	1378	37
56	1240	12	117	1395	45
57	1241	12	118	1422	60
58	1242	12	119	1478	93
59	1244	12	120	1500	446
60	1245	12			

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 7.4.15
2013 AIMS A Raw Score to Scale Score Reading High School

Raw Score	Scale Score	*SEM*	Raw Score	Scale Score	*SEM*
0	1000	447	61	1249	11
1	1000	100	62	1250	11
2	1005	70	63	1251	11
3	1044	56	64	1253	11
4	1070	47	65	1254	11
5	1089	41	66	1255	11
6	1104	36	67	1256	11
7	1116	33	68	1258	11
8	1126	30	69	1259	11
9	1134	28	70	1260	11
10	1141	26	71	1261	11
11	1147	24	72	1263	11
12	1153	23	73	1264	11
13	1158	22	74	1265	11
14	1162	21	75	1266	11
15	1167	20	76	1268	11
16	1170	19	77	1269	11
17	1174	18	78	1270	11
18	1177	18	79	1272	12
19	1180	17	80	1273	12
20	1183	17	81	1274	12
21	1186	16	82	1276	12
22	1188	16	83	1277	12
23	1191	15	84	1278	12
24	1193	15	85	1280	12
25	1195	15	86	1281	12
26	1197	15	87	1283	12
27	1200	14	88	1284	12
28	1202	14	89	1286	13
29	1203	14	90	1287	13
30	1205	14	91	1289	13
31	1207	13	92	1291	13
32	1209	13	93	1292	13
33	1211	13	94	1294	13
34	1212	13	95	1296	14
35	1214	13	96	1298	14
36	1216	13	97	1300	14
37	1217	12	98	1302	14
38	1219	12	99	1304	15
39	1220	12	100	1306	15
40	1222	12	101	1309	15
41	1223	12	102	1311	16
42	1225	12	103	1314	16
43	1226	12	104	1316	17
44	1227	12	105	1319	17
45	1229	12	106	1322	18
46	1230	12	107	1325	19
47	1231	12	108	1329	19
48	1233	11	109	1333	20
49	1234	11	110	1337	22
50	1235	11	111	1342	23
51	1237	11	112	1348	24
52	1238	11	113	1354	27
53	1239	11	114	1362	29
54	1240	11	115	1372	33
55	1242	11	116	1384	38
56	1243	11	117	1401	45
57	1244	11	118	1428	59
58	1245	11	119	1481	91
59	1247	11	120	1500	445
60	1248	11			

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 7.4.16
2013 AIMS A Raw Score to Scale Score Science Grade 4

Raw Score	Scale Score	*SEM*	Raw Score	Scale Score	*SEM*
0	1000	447	61	1248	11
1	1000	101	62	1249	11
2	1000	71	63	1250	11
3	1015	58	64	1252	11
4	1044	50	65	1253	11
5	1066	44	66	1254	11
6	1083	40	67	1255	11
7	1097	36	68	1256	11
8	1109	33	69	1258	11
9	1120	31	70	1259	11
10	1128	29	71	1260	11
11	1136	27	72	1261	11
12	1143	25	73	1263	11
13	1149	24	74	1264	11
14	1154	23	75	1265	11
15	1159	22	76	1266	11
16	1164	21	77	1268	11
17	1168	20	78	1269	11
18	1172	19	79	1270	11
19	1175	19	80	1272	12
20	1178	18	81	1273	12
21	1182	17	82	1274	12
22	1185	17	83	1276	12
23	1187	16	84	1277	12
24	1190	16	85	1279	12
25	1192	16	86	1280	12
26	1195	15	87	1282	12
27	1197	15	88	1283	12
28	1199	15	89	1285	13
29	1201	14	90	1286	13
30	1203	14	91	1288	13
31	1205	14	92	1290	13
32	1207	14	93	1291	13
33	1209	13	94	1293	14
34	1211	13	95	1295	14
35	1212	13	96	1297	14
36	1214	13	97	1299	14
37	1216	13	98	1301	15
38	1217	13	99	1303	15
39	1219	12	100	1305	15
40	1220	12	101	1308	16
41	1222	12	102	1310	16
42	1223	12	103	1313	17
43	1225	12	104	1316	17
44	1226	12	105	1319	18
45	1228	12	106	1322	19
46	1229	12	107	1326	19
47	1230	12	108	1330	20
48	1232	12	109	1334	21
49	1233	11	110	1339	23
50	1234	11	111	1344	24
51	1236	11	112	1350	26
52	1237	11	113	1358	28
53	1238	11	114	1366	31
54	1239	11	115	1377	35
55	1241	11	116	1392	40
56	1242	11	117	1411	49
57	1243	11	118	1442	63
58	1244	11	119	1500	94
59	1246	11	120	1500	446
60	1247	11			

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 7.4.17
2013 AIMS A Raw Score to Scale Score Science Grade 8

Raw Score	Scale Score	*SEM*	Raw Score	Scale Score	*SEM*
0	1000	373	61	1253	10
1	1000	83	62	1254	10
2	1023	58	63	1255	10
3	1056	47	64	1256	10
4	1078	40	65	1257	10
5	1095	35	66	1258	10
6	1108	32	67	1259	10
7	1119	29	68	1260	10
8	1129	27	69	1262	10
9	1137	25	70	1263	10
10	1144	23	71	1264	10
11	1150	22	72	1265	10
12	1155	21	73	1266	10
13	1160	20	74	1267	10
14	1165	19	75	1268	10
15	1169	18	76	1269	10
16	1173	18	77	1270	10
17	1177	17	78	1272	10
18	1180	17	79	1273	10
19	1184	16	80	1274	10
20	1187	16	81	1275	10
21	1189	15	82	1276	10
22	1192	15	83	1277	10
23	1195	15	84	1279	10
24	1197	14	85	1280	10
25	1200	14	86	1281	10
26	1202	14	87	1282	10
27	1204	13	88	1284	10
28	1206	13	89	1285	10
29	1208	13	90	1286	11
30	1210	13	91	1288	11
31	1212	12	92	1289	11
32	1214	12	93	1290	11
33	1216	12	94	1292	11
34	1217	12	95	1293	11
35	1219	12	96	1295	11
36	1221	12	97	1297	12
37	1222	11	98	1298	12
38	1224	11	99	1300	12
39	1225	11	100	1302	12
40	1227	11	101	1304	13
41	1228	11	102	1305	13
42	1229	11	103	1308	13
43	1231	11	104	1310	14
44	1232	11	105	1312	14
45	1234	10	106	1314	15
46	1235	10	107	1317	15
47	1236	10	108	1320	16
48	1237	10	109	1323	17
49	1239	10	110	1327	17
50	1240	10	111	1330	18
51	1241	10	112	1335	20
52	1242	10	113	1340	21
53	1244	10	114	1346	24
54	1245	10	115	1353	27
55	1246	10	116	1363	31
56	1247	10	117	1377	37
57	1248	10	118	1399	49
58	1249	10	119	1442	76
59	1250	10	120	1500	371
60	1252	10			

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 7.4.18
2013 AIMS A Raw Score to Scale Score Science Grade 10

Raw Score	Scale Score	*SEM*	Raw Score	Scale Score	*SEM*
0	1000	339	61	1246	8
1	1007	75	62	1247	8
2	1058	53	63	1248	8
3	1087	42	64	1249	8
4	1107	36	65	1250	8
5	1122	31	66	1251	8
6	1133	28	67	1252	8
7	1142	25	68	1252	8
8	1149	23	69	1253	9
9	1156	21	70	1254	9
10	1161	20	71	1255	9
11	1166	19	72	1256	9
12	1170	18	73	1257	9
13	1174	17	74	1258	9
14	1178	16	75	1259	9
15	1181	15	76	1260	9
16	1184	15	77	1261	9
17	1187	14	78	1262	9
18	1189	14	79	1263	9
19	1192	13	80	1264	9
20	1194	13	81	1265	9
21	1196	13	82	1266	9
22	1198	12	83	1267	9
23	1200	12	84	1269	9
24	1202	12	85	1270	9
25	1204	11	86	1271	9
26	1206	11	87	1272	9
27	1207	11	88	1273	9
28	1209	11	89	1274	10
29	1210	11	90	1275	10
30	1212	11	91	1277	10
31	1213	10	92	1278	10
32	1215	10	93	1279	10
33	1216	10	94	1281	10
34	1217	10	95	1282	10
35	1219	10	96	1283	10
36	1220	10	97	1285	11
37	1221	10	98	1286	11
38	1222	10	99	1288	11
39	1223	9	100	1289	11
40	1225	9	101	1291	11
41	1226	9	102	1293	12
42	1227	9	103	1295	12
43	1228	9	104	1297	12
44	1229	9	105	1299	13
45	1230	9	106	1301	13
46	1231	9	107	1304	14
47	1232	9	108	1306	14
48	1233	9	109	1309	15
49	1234	9	110	1312	16
50	1235	9	111	1316	17
51	1236	9	112	1320	18
52	1237	9	113	1325	20
53	1238	9	114	1330	22
54	1239	9	115	1337	24
55	1240	9	116	1346	28
56	1241	9	117	1358	34
57	1242	9	118	1378	45
58	1243	9	119	1419	69
59	1244	8	120	1500	337
60	1245	8			

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Part 8: Test Results

8.1 Data

Part 8 of this Technical Report contains information about the results of the 2013 spring administration of AIMS A. This section provides information on the scores from the AIMS A assessments. The AERA/APA/NCME standards addressed in Part 8 include: 1.5, 4.3, 4.5, 4.6, 4.7, 6.35, 7.1, 7.10, 13.15, and 13.19.

Results presented are based on population data contained within the final electronic data files. The results presented in this part of the Technical Report may differ slightly from final testing results presented on the Arizona Department of Education website due to slight differences in the application of exclusion rules. Official final results typically use more detailed school-level information than is used to conduct research analyses. The results in the following tables are presented as evidence of reliability and validity of the AIMS A assessments and should not be used for state accountability purposes.

8.1.1 AIMS A State Test Results

The AIMS A test results for Mathematics, Reading, and Science are each on a scale for Grades 3-8 and High School that runs from a lowest obtainable scale score (LOSS) of 1000 to a highest obtainable scale score (HOSS) of 1500. The LOSS and HOSS values for each grade/subject can be found in Table 8.1.1.1.

Test results for each grade level and content area test follow in Tables 8.1.1.2 through 8.1.1.4. For each grade and subject, these tables present the number (*N*) of students who took the exam in 2013, the mean scale score (*M*) and standard deviation *(SD*), the percentages of students in each performance level (Falls Far Below the Standard, FFBS; Approaches the Standard, AS; Meets the Standard, MS; and Exceeds the Standard, ES) as well as the percentage of students who either had no response (NR) to any item or had their score invalidated (INV). These descriptive statistics are presented for the state as a whole and disaggregated into various demographic groups.

The scale score frequency distributions are also presented in Tables 8.1.1.5 through 8.1.1.22. These tables additionally show the raw score, scale score, number of students scoring each total score (frequency, FREQ), the percent (%) of students scoring each total score, and cumulative percentage (CUML %) which is the percentage of students who scored at or below each total score.

Table 8.1.1.1
2013 AIMS A LOSS and HOSS Table

Content	Grade	LOSS	HOSS
Mathematics	3	1000	1500
	4	1000	1500
	5	1000	1500
	6	1000	1500
	7	1000	1500
	8	1000	1500
	9	1000	1500
	HS	1000	1500
Reading	3	1000	1500
	4	1000	1500
	5	1000	1500
	6	1000	1500
	7	1000	1500
	8	1000	1500
	HS	1000	1500
Science	4	1000	1500
	8	1000	1500
	10	1000	1500

Table 8.1.1.2
2013 AIMS A State Test Results
Mathematics Grades 3-8 and High School

		Scale Score		% at Performance Level					
	N	*M*	*SD*	FFBS	AS	MS	ES	NR	INV
Grade 3									
Total	934	1265.09	52.90	8%	15%	56%	21%	1%	0%
Ethnic Background									
White	308	1265.81	50.59	6%	17%	58%	19%	2%	0%
Black	77	1272.19	32.91	8%	10%	60%	22%	0%	0%
Hispanic	437	1261.78	58.44	10%	16%	53%	21%	2%	0%
American Indian	64	1278.50	37.25	8%	6%	59%	27%	0%	0%
Asian	26	1261.38	66.85	12%	12%	50%	27%	0%	0%
Hawaiian Pacific Islander	6	*	*	*	*	*	*	*	*
Multiracial	16	1264.50	43.71	13%	13%	56%	19%	0%	0%
Other	0	*	*	*	*	*	*	*	*
Gender									
Male	592	1271.17	43.33	6%	16%	54%	24%	1%	0%
Female	342	1254.57	65.01	13%	13%	59%	15%	3%	0%
Need									
Autism	277	1271.77	40.62	6%	14%	57%	22%	0%	0%
DD	44	1289.55	27.58	0%	7%	50%	43%	0%	0%
ED	8	*	*	*	*	*	*	*	*
EDP	1	*	*	*	*	*	*	*	*
HI	4	*	*	*	*	*	*	*	*
MD	20	1268.30	34.85	5%	20%	60%	15%	0%	0%
MDSSI	65	1206.80	85.41	35%	31%	31%	3%	9%	0%
MIMR	270	1281.99	27.53	1%	9%	61%	29%	0%	0%
MOMR	114	1255.20	33.84	7%	22%	68%	4%	0%	0%
OHI	27	1275.44	67.10	7%	7%	56%	30%	4%	0%
OI	56	1243.27	55.91	18%	29%	46%	7%	4%	0%
SLD	14	1299.57	27.48	0%	0%	43%	57%	0%	0%
SLI	6	*	*	*	*	*	*	*	*
SMR	24	1152.33	109.54	54%	29%	17%	0%	17%	0%
VI	4	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	602	1265.87	52.90	8%	14%	55%	22%	2%	0%
No Lunch Assistance	332	1263.67	52.95	9%	16%	57%	18%	1%	0%
Other	0	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	927	1265.32	52.76	8%	15%	56%	21%	2%	0%
Migrant	7	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
ELL									
Non-ELL	877	1263.81	53.54	9%	15%	56%	20%	2%	0%
ELL	57	1284.84	36.74	2%	9%	54%	35%	0%	0%
Other	0	*	*	*	*	*	*	*	*

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		Scale Score		% at Performance Level					
	N	***M***	***SD***	**FFBS**	**AS**	**MS**	**ES**	**NR**	**INV**
Grade 4									
Total	992	1269.84	65.74	10%	16%	52%	23%	3%	0%
Ethnic Background									
White	339	1272.91	58.70	9%	15%	52%	24%	3%	0%
Black	72	1255.29	80.28	13%	19%	42%	26%	0%	0%
Hispanic	464	1270.18	69.13	11%	15%	52%	22%	3%	0%
American Indian	72	1255.99	61.56	13%	17%	60%	11%	6%	0%
Asian	25	1283.04	52.60	4%	20%	56%	20%	5%	0%
Hawaiian Pacific Islander	4	*	*	*	*	*	*	*	*
Multiracial	14	1301.14	64.87	7%	14%	36%	43%	0%	0%
Other	2	*	*	*	*	*	*	*	*
Gender									
Male	656	1269.97	68.35	11%	15%	50%	24%	2%	0%
Female	336	1269.60	60.42	10%	16%	54%	20%	2%	0%
Need									
Autism	300	1273.93	47.56	6%	21%	52%	20%	0%	0%
DD	11	1322.18	69.05	0%	0%	64%	36%	0%	0%
ED	5	*	*	*	*	*	*	*	*
EDP	1	*	*	*	*	*	*	*	*
HI	5	*	*	*	*	*	*	*	*
MD	19	1273.79	39.20	11%	5%	63%	21%	0%	0%
MDSSI	56	1159.68	104.39	63%	20%	14%	4%	21%	0%
MIMR	326	1293.45	39.74	1%	6%	58%	34%	0%	0%
MOMR	133	1252.64	41.48	14%	26%	55%	5%	2%	0%
OHI	17	1320.00	82.42	6%	6%	41%	47%	0%	0%
OI	66	1248.41	62.10	20%	20%	50%	11%	12%	0%
SLD	26	1324.96	56.92	0%	0%	46%	54%	0%	0%
SLI	2	*	*	*	*	*	*	*	*
SMR	21	1147.52	112.61	57%	29%	14%	0%	19%	0%
VI	4	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	628	1271.39	68.06	10%	14%	50%	26%	3%	0%
No Lunch Assistance	362	1267.02	61.58	10%	18%	55%	17%	1%	0%
Other	2	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	984	1269.77	65.73	10%	16%	52%	23%	2%	0%
Migrant	6	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
ELL									
Non-ELL	948	1269.81	65.35	10%	16%	51%	23%	2%	0%
ELL	42	1269.33	75.49	12%	10%	57%	21%	5%	0%
Other	2	*	*	*	*	*	*	*	*

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		Scale Score		% at Performance Level					
	N	***M***	***SD***	**FFBS**	**AS**	**MS**	**ES**	**NR**	**INV**
Grade 5									
Total	958	1263.20	54.52	9%	13%	68%	10%	2%	0%
Ethnic Background									
White	357	1263.67	55.41	10%	13%	66%	11%	1%	0%
Black	72	1269.89	27.96	7%	15%	67%	11%	0%	0%
Hispanic	418	1261.26	56.46	10%	14%	67%	10%	2%	0%
American Indian	72	1272.13	38.30	3%	7%	85%	6%	1%	0%
Asian	18	1253.50	67.88	11%	6%	78%	6%	6%	0%
Hawaiian Pacific Islander	4	*	*	*	*	*	*	*	*
Multiracial	15	1249.27	79.54	13%	7%	67%	13%	7%	0%
Other	2	*	*	*	*	*	*	*	*
Gender									
Male	610	1267.91	48.70	7%	13%	68%	12%	1%	0%
Female	348	1254.94	62.67	13%	13%	67%	7%	3%	0%
Need									
Autism	296	1266.73	35.57	7%	16%	67%	10%	0%	0%
DD	1	*	*	*	*	*	*	*	*
ED	13	1293.62	14.71	0%	0%	77%	23%	0%	0%
EDP	1	*	*	*	*	*	*	*	*
HI	1	*	*	*	*	*	*	*	*
MD	20	1256.30	82.35	10%	35%	45%	10%	0%	0%
MDSSI	51	1186.55	105.41	47%	22%	29%	2%	18%	0%
MIMR	298	1283.30	22.50	0%	3%	83%	13%	0%	0%
MOMR	134	1253.10	34.85	13%	18%	68%	1%	0%	0%
OHI	16	1281.25	26.63	6%	0%	81%	13%	0%	0%
OI	57	1212.70	102.58	33%	19%	42%	5%	12%	0%
SLD	43	1297.49	38.20	0%	0%	67%	33%	0%	0%
SLI	2	*	*	*	*	*	*	*	*
SMR	21	1207.52	64.73	33%	48%	19%	0%	5%	0%
VI	2	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	613	1266.39	50.39	8%	10%	71%	11%	2%	0%
No Lunch Assistance	343	1257.32	60.85	11%	17%	63%	9%	2%	0%
Other	2	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	949	1263.21	54.45	9%	13%	68%	10%	2%	0%
Migrant	7	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
ELL									
Non-ELL	926	1262.50	55.17	10%	13%	67%	10%	2%	0%
ELL	30	1282.57	19.99	0%	3%	80%	17%	0%	0%
Other	2	*	*	*	*	*	*	*	*

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		Scale Score		% at Performance Level					
	N	***M***	***SD***	**FFBS**	**AS**	**MS**	**ES**	**NR**	**INV**
Grade 6									
Total	938	1263.64	68.00	7%	22%	56%	15%	2%	0%
Ethnic Background									
White	355	1263.63	62.04	6%	23%	58%	14%	2%	0%
Black	80	1270.99	63.68	8%	18%	60%	15%	0%	0%
Hispanic	414	1263.20	71.50	8%	21%	55%	16%	3%	0%
American Indian	50	1271.22	78.56	8%	14%	54%	24%	4%	0%
Asian	19	1226.26	87.78	11%	53%	32%	5%	0%	0%
Hawaiian Pacific Islander	3	*	*	*	*	*	*	*	*
Multiracial	17	1253.65	55.38	18%	12%	59%	12%	0%	0%
Other	0	*	*	*	*	*	*	*	*
Gender									
Male	596	1268.01	67.44	7%	20%	56%	17%	2%	0%
Female	342	1256.02	68.39	9%	25%	55%	11%	3%	0%
Need									
Autism	245	1269.83	52.56	3%	24%	58%	15%	1%	0%
DD	0	*	*	*	*	*	*	*	*
ED	9	*	*	*	*	*	*	*	*
EDP	9	*	*	*	*	*	*	*	*
HI	4	*	*	*	*	*	*	*	*
MD	20	1259.45	39.18	5%	25%	65%	5%	0%	0%
MDSSI	61	1174.92	104.02	41%	33%	23%	3%	15%	0%
MIMR	310	1291.51	36.18	0%	9%	69%	21%	0%	0%
MOMR	127	1247.98	54.41	5%	44%	46%	5%	1%	0%
OHI	19	1304.63	51.15	0%	11%	53%	37%	0%	0%
OI	76	1223.82	91.69	24%	21%	47%	8%	7%	0%
SLD	27	1317.30	36.62	0%	4%	52%	44%	0%	0%
SLI	3	*	*	*	*	*	*	*	*
SMR	24	1177.17	74.86	38%	58%	4%	0%	8%	0%
VI	4	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	606	1271.52	61.47	6%	18%	58%	17%	1%	0%
No Lunch Assistance	332	1249.26	76.55	10%	27%	51%	11%	4%	0%
Other	0	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	934	1263.72	68.11	7%	22%	56%	15%	2%	0%
Migrant	4	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
ELL									
Non-ELL	911	1262.81	68.60	8%	22%	55%	15%	2%	0%
ELL	27	1291.81	32.40	0%	4%	81%	15%	0%	0%
Other	0	*	*	*	*	*	*	*	*

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		Scale Score		% at Performance Level					
	N	***M***	***SD***	**FFBS**	**AS**	**MS**	**ES**	**NR**	**INV**
Grade 7									
Total	1023	1281.56	67.19	5%	17%	50%	27%	1%	0%
Ethnic Background									
White	385	1278.86	66.31	5%	19%	52%	23%	1%	0%
Black	76	1285.55	61.92	8%	11%	51%	30%	1%	0%
Hispanic	434	1283.12	69.29	5%	17%	49%	29%	2%	0%
American Indian	71	1288.99	61.40	4%	20%	46%	30%	0%	0%
Asian	37	1282.32	56.80	5%	14%	59%	22%	0%	0%
Hawaiian Pacific Islander	1	*	*	*	*	*	*	*	*
Multiracial	17	1283.71	58.65	6%	18%	47%	29%	0%	0%
Other	2	*	*	*	*	*	*	*	*
Gender									
Male	633	1285.11	66.85	5%	19%	47%	30%	1%	0%
Female	390	1275.79	67.43	6%	16%	55%	23%	2%	0%
Need									
Autism	222	1283.30	61.37	4%	22%	50%	23%	0%	0%
DD	0	*	*	*	*	*	*	*	*
ED	10	*	*	*	*	*	*	*	*
EDP	11	1297.45	30.28	0%	0%	82%	18%	0%	0%
HI	5	*	*	*	*	*	*	*	*
MD	21	1281.76	44.84	0%	24%	48%	29%	0%	0%
MDSSI	59	1203.00	87.58	34%	34%	27%	5%	8%	0%
MIMR	369	1309.28	40.29	0%	5%	57%	38%	0%	0%
MOMR	145	1266.07	41.13	1%	28%	59%	11%	1%	0%
OHI	22	1315.18	38.47	0%	5%	45%	50%	0%	0%
OI	74	1241.09	80.03	11%	38%	42%	9%	3%	0%
SLD	39	1335.03	48.33	0%	3%	28%	69%	0%	0%
SLI	5	*	*	*	*	*	*	*	*
SMR	37	1161.05	92.21	41%	43%	16%	0%	16%	0%
VI	3	*	*	*	*	*	*	*	*
Other	1	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	643	1288.63	64.47	4%	15%	50%	30%	1%	0%
No Lunch Assistance	378	1270.20	69.65	7%	22%	51%	21%	2%	0%
Other	2	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	1016	1281.68	67.07	0%	100%	100%	300%	1%	0%
Migrant	5	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
ELL									
Non-ELL	991	1281.08	67.62	5%	18%	50%	27%	1%	0%
ELL	30	1305.87	34.09	0%	3%	57%	40%	0%	3%
Other	2	*	*	*	*	*	*	*	*

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		Scale Score		% at Performance Level					
	N	***M***	***SD***	**FFBS**	**AS**	**MS**	**ES**	**NR**	**INV**
Grade 8									
Total	976	1272.43	65.42	6%	19%	46%	29%	2%	0%
Ethnic Background									
White	382	1269.40	70.86	9%	17%	46%	28%	3%	1%
Black	75	1278.89	49.76	4%	19%	44%	33%	0%	0%
Hispanic	403	1275.47	62.66	4%	19%	47%	30%	2%	0%
American Indian	78	1271.03	59.84	5%	21%	49%	26%	1%	0%
Asian	22	1260.09	89.74	14%	36%	23%	27%	5%	0%
Hawaiian Pacific Islander	1	*	*	*	*	*	*	*	*
Multiracial	13	1276.08	40.37	8%	15%	46%	31%	0%	0%
Other	2	*	*	*	*	*	*	*	*
Gender									
Male	600	1275.13	64.88	6%	19%	43%	32%	2%	0%
Female	376	1268.11	66.14	7%	18%	50%	25%	3%	0%
Need									
Autism	230	1275.07	57.09	4%	25%	41%	30%	2%	0%
DD	0	*	*	*	*	*	*	*	*
ED	11	1297.36	20.59	0%	0%	64%	36%	0%	0%
EDP	8	*	*	*	*	*	*	*	*
HI	2	*	*	*	*	*	*	*	*
MD	14	1282.71	42.44	0%	7%	64%	29%	0%	0%
MDSSI	72	1195.53	96.77	32%	31%	35%	3%	15%	0%
MIMR	332	1298.53	38.78	0%	5%	53%	42%	0%	1%
MOMR	161	1259.94	30.27	3%	34%	55%	9%	0%	0%
OHI	17	1294.24	85.34	6%	0%	35%	59%	6%	0%
OI	70	1226.29	92.53	24%	27%	36%	13%	6%	0%
SLD	35	1329.83	54.38	0%	0%	29%	71%	0%	3%
SLI	3	*	*	*	*	*	*	*	*
SMR	17	1174.82	92.17	41%	53%	6%	0%	0%	0%
VI	2	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	584	1277.66	57.17	4%	17%	48%	31%	2%	0%
No Lunch Assistance	390	1265.03	75.42	9%	21%	44%	26%	3%	1%
Other	2	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	969	1272.75	65.46	6%	18%	46%	29%	2%	0%
Migrant	5	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
ELL									
Non-ELL	952	1271.70	64.82	6%	19%	46%	29%	2%	0%
ELL	22	1311.64	77.03	0%	14%	45%	41%	0%	0%
Other	2	*	*	*	*	*	*	*	*

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		Scale Score		% at Performance Level					
	N	*M*	*SD*	FFBS	AS	MS	ES	NR	INV
High School									
Total	977	1271.13	68.33	7%	18%	62%	12%	2%	0%
Ethnic Background									
White	419	1275.29	65.08	5%	18%	63%	13%	2%	0%
Black	78	1279.04	55.71	6%	14%	71%	9%	1%	0%
Hispanic	370	1263.24	75.64	10%	21%	59%	11%	3%	0%
American Indian	77	1289.97	47.58	5%	10%	66%	18%	0%	0%
Asian	19	1240.37	93.80	16%	16%	63%	5%	5%	0%
Hawaiian Pacific Islander	1	*	*	*	*	*	*	*	*
Multiracial	12	1256.08	33.96	8%	33%	58%	0%	0%	0%
Other	1	*	*	*	*	*	*	*	*
Gender									
Male	617	1273.01	68.02	8%	18%	60%	14%	2%	0%
Female	360	1267.90	68.84	6%	19%	66%	9%	3%	0%
Need									
Autism	187	1277.00	57.62	4%	24%	57%	15%	0%	0%
DD	0	*	*	*	*	*	*	*	*
ED	12	1335.08	19.57	0%	0%	33%	67%	0%	0%
EDP	17	1304.88	39.85	0%	0%	77%	24%	0%	0%
HI	1	*	*	*	*	*	*	*	*
MD	24	1282.71	42.93	4%	17%	67%	13%	0%	0%
MDSSI	48	1173.77	109.90	42%	25%	33%	0%	17%	0%
MIMR	317	1297.84	30.58	0%	5%	82%	12%	0%	0%
MOMR	170	1247.71	50.66	7%	38%	52%	3%	2%	0%
OHI	29	1313.48	30.58	0%	0%	76%	24%	0%	0%
OI	98	1237.39	78.52	14%	28%	58%	0%	4%	0%
SLD	41	1333.68	46.00	0%	0%	49%	51%	0%	0%
SLI	2	*	*	*	*	*	*	*	*
SMR	29	1155.07	96.96	55%	41%	3%	0%	21%	0%
VI	1	*	*	*	*	*	*	*	*
Other	1	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	564	1274.23	69.15	8%	15%	64%	14%	2%	0%
No Lunch Assistance	412	1267.11	66.98	7%	23%	60%	10%	2%	0%
Other	1	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	971	1271.33	68.31	7%	18%	62%	12%	2%	0%
Migrant	4	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
ELL									
Non-ELL	955	1270.81	68.61	7%	18%	62%	12%	2%	0%
ELL	21	1289.86	49.74	5%	14%	67%	14%	0%	0%
Other	1	*	*	*	*	*	*	*	*

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Table 8.1.1.3
2013 AIMS A State Test Results
Reading Grades 3-8 and High School

		Scale Score		% at Performance Level					
	N	*M*	*SD*	FFBS	AS	MS	ES	NR	INV
Grade 3									
Total	934	1259.31	59.17	11%	17%	56%	16%	2%	0%
Ethnic Background									
White	308	1260.17	58.40	11%	16%	58%	15%	2%	0%
Black	77	1262.22	42.78	9%	17%	62%	12%	0%	0%
Hispanic	437	1256.89	62.32	11%	18%	56%	15%	2%	0%
American Indian	64	1273.14	49.87	9%	19%	45%	27%	0%	0%
Asian	26	1241.88	80.27	23%	4%	58%	15%	4%	0%
Hawaiian Pacific Islander	6	*	*	*	*	*	*	*	*
Multiracial	16	1263.63	46.12	19%	0%	63%	19%	0%	0%
Other	0	*	*	*	*	*	*	*	*
Gender									
Male	592	1264.82	50.86	9%	17%	57%	17%	1%	0%
Female	342	1249.75	70.38	15%	16%	56%	13%	4%	0%
Need									
Autism	277	1263.30	46.05	8%	20%	58%	13%	0%	0%
DD	44	1287.09	33.33	2%	11%	55%	32%	0%	0%
ED	8	*	*	*	*	*	*	*	*
EDP	1	*	*	*	*	*	*	*	*
HI	4	*	*	*	*	*	*	*	*
MD	20	1264.25	38.09	15%	10%	55%	20%	0%	0%
MDSSI	65	1180.25	89.15	57%	20%	22%	2%	12%	0%
MIMR	270	1281.04	60.32	2%	8%	68%	23%	0%	0%
MOMR	114	1253.61	39.81	10%	25%	61%	5%	0%	0%
OHI	27	1277.30	71.46	4%	11%	59%	26%	4%	0%
OI	56	1241.59	61.20	18%	29%	48%	5%	2%	0%
SLD	14	1296.64	29.78	0%	7%	43%	50%	0%	0%
SLI	6	*	*	*	*	*	*	*	*
SMR	24	1129.17	105.43	58%	38%	4%	0%	25%	0%
VI	4	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	602	1261.26	57.31	10%	16%	58%	15%	2%	0%
No Lunch Assistance	332	1255.77	62.34	13%	17%	53%	16%	2%	0%
Other	0	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	927	1259.70	58.69	11%	17%	56%	16%	2%	0%
Migrant	7	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
ELL									
Non-ELL	877	1257.85	60.09	12%	17%	56%	15%	2%	0%
ELL	57	1281.74	36.22	2%	16%	58%	25%	0%	0%
Other	0	*	*	*	*	*	*	*	*

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		Scale Score		% at Performance Level					
	N	*M*	*SD*	FFBS	AS	MS	ES	NR	INV
Grade 4									
Total	992	1271.81	71.05	7%	20%	61%	12%	2%	0%
Ethnic Background									
White	339	1274.87	66.25	5%	20%	63%	13%	2%	0%
Black	72	1252.54	85.55	13%	26%	51%	10%	3%	0%
Hispanic	464	1273.85	73.41	7%	19%	61%	14%	2%	0%
American Indian	72	1258.54	70.62	8%	22%	67%	3%	4%	0%
Asian	25	1275.24	41.67	0%	28%	60%	12%	0%	0%
Hawaiian Pacific Islander	4	*	*	*	*	*	*	*	*
Multiracial	14	1279.57	59.92	0%	36%	50%	14%	0%	0%
Other	2	*	*	*	*	*	*	*	*
Gender									
Male	656	1270.26	73.70	8%	20%	61%	12%	2%	0%
Female	336	1274.83	65.57	4%	22%	61%	13%	2%	0%
Need									
Autism	300	1271.09	50.87	3%	26%	60%	11%	0%	0%
DD	11	1314.82	30.29	0%	0%	82%	18%	0%	0%
ED	5	*	*	*	*	*	*	*	*
EDP	1	*	*	*	*	*	*	*	*
HI	5	*	*	*	*	*	*	*	*
MD	19	1279.84	50.65	5%	16%	63%	16%	0%	0%
MDSSI	56	1145.20	109.22	59%	21%	18%	2%	21%	0%
MIMR	326	1301.57	45.01	0%	8%	75%	17%	0%	0%
MOMR	133	1254.20	53.18	5%	38%	53%	5%	2%	0%
OHI	17	1315.12	64.04	0%	6%	65%	29%	0%	0%
OI	66	1251.76	74.89	9%	33%	48%	9%	3%	0%
SLD	26	1332.38	61.59	0%	4%	65%	31%	0%	0%
SLI	2	*	*	*	*	*	*	*	*
SMR	21	1160.76	99.04	43%	33%	24%	0%	19%	0%
VI	4	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	628	1273.80	73.35	6%	18%	63%	13%	1%	0%
No Lunch Assistance	362	1268.09	66.91	7%	24%	57%	12%	4%	0%
Other	2	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	984	1271.75	71.15	7%	20%	61%	12%	2%	0%
Migrant	6	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
ELL									
Non-ELL	948	1271.90	70.84	7%	21%	60%	12%	2%	0%
ELL	42	1267.45	77.07	7%	10%	74%	10%	2%	0%
Other	2	*	*	*	*	*	*	*	*

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		Scale Score		% at Performance Level					
	N	***M***	***SD***	**FFBS**	**AS**	**MS**	**ES**	**NR**	**INV**
Grade 5									
Total	958	1281.29	84.84	6%	22%	48%	24%	2%	0%
Ethnic Background									
White	357	1279.21	87.23	7%	22%	44%	26%	2%	0%
Black	72	1262.50	85.14	1%	22%	50%	26%	0%	0%
Hispanic	418	1295.99	72.76	6%	23%	49%	22%	2%	0%
American Indian	72	1280.34	85.87	3%	10%	63%	25%	1%	0%
Asian	18	1291.13	59.26	6%	28%	56%	11%	6%	0%
Hawaiian Pacific Islander	4	*	*	*	*	*	*	*	*
Multiracial	15	1263.53	122.48	13%	20%	40%	27%	7%	0%
Other	2	*	*	*	*	*	*	*	*
Gender									
Male	610	1284.92	82.64	4%	25%	46%	25%	1%	0%
Female	348	1274.91	88.32	9%	17%	51%	23%	3%	0%
Need									
Autism	296	1276.95	71.83	3%	32%	46%	19%	0%	0%
DD	1	*	*	*	*	*	*	*	*
ED	13	1320.92	41.91	0%	0%	62%	38%	0%	0%
EDP	1	*	*	*	*	*	*	*	*
HI	1	*	*	*	*	*	*	*	*
MD	20	1256.65	87.28	10%	35%	50%	5%	0%	0%
MDSSI	51	1171.59	118.81	41%	31%	22%	6%	18%	0%
MIMR	298	1320.45	56.21	0%	7%	55%	38%	0%	0%
MOMR	134	1257.29	59.44	6%	31%	54%	8%	1%	0%
OHI	16	1344.56	78.15	0%	6%	38%	56%	0%	0%
OI	57	1219.47	122.75	23%	30%	30%	18%	14%	0%
SLD	43	1339.23	68.02	0%	2%	56%	42%	0%	0%
SLI	2	*	*	*	*	*	*	*	*
SMR	21	1188.57	82.94	29%	43%	29%	0%	5%	0%
VI	2	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	613	1288.39	81.72	5%	20%	49%	26%	2%	0%
No Lunch Assistance	343	1268.29	88.70	9%	26%	46%	19%	3%	0%
Other	2	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	949	1281.24	84.66	6%	22%	48%	24%	2%	0%
Migrant	7	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
ELL									
Non-ELL	926	1279.82	84.87	6%	22%	48%	23%	2%	0%
ELL	30	1323.17	71.83	0%	10%	53%	37%	0%	0%
Other	2	*	*	*	*	*	*	*	*

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		Scale Score		% at Performance Level					
	N	***M***	***SD***	**FFBS**	**AS**	**MS**	**ES**	**NR**	**INV**
Grade 6									
Total	938	1284.30	85.96	7%	24%	46%	24%	2%	0%
Ethnic Background									
White	355	1285.79	80.25	4%	26%	48%	22%	2%	0%
Black	80	1286.93	75.10	6%	24%	39%	31%	0%	0%
Hispanic	414	1284.54	90.80	9%	21%	45%	25%	2%	0%
American Indian	50	1280.94	97.80	8%	16%	52%	24%	2%	0%
Asian	19	1239.68	65.89	11%	47%	37%	5%	0%	0%
Hawaiian Pacific Islander	3	*	*	*	*	*	*	*	*
Multiracial	17	1285.59	100.10	18%	24%	29%	29%	0%	0%
Other	0	*	*	*	*	*	*	*	*
Gender									
Male	596	1288.13	84.54	5%	24%	45%	26%	1%	0%
Female	342	1277.63	88.12	9%	22%	47%	21%	2%	0%
Need									
Autism	245	1282.13	68.31	2%	29%	50%	18%	0%	0%
DD	0	*	*	*	*	*	*	*	*
ED	9	*	*	*	*	*	*	*	*
EDP	9	*	*	*	*	*	*	*	*
HI	4	*	*	*	*	*	*	*	*
MD	20	1275.55	66.46	0%	35%	55%	10%	0%	0%
MDSSI	61	1177.48	108.03	41%	33%	21%	5%	10%	0%
MIMR	310	1326.29	61.27	0%	9%	53%	38%	0%	0%
MOMR	127	1255.32	59.52	6%	43%	44%	8%	1%	0%
OHI	19	1328.84	52.21	0%	5%	53%	42%	0%	0%
OI	76	1241.29	100.49	20%	30%	41%	9%	7%	0%
SLD	27	1377.93	72.25	0%	0%	22%	78%	0%	0%
SLI	3	*	*	*	*	*	*	*	*
SMR	24	1177.75	70.16	38%	46%	17%	0%	8%	0%
VI	4	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	606	1293.30	82.14	6%	20%	46%	28%	1%	0%
No Lunch Assistance	332	1267.87	90.37	9%	29%	45%	17%	3%	0%
Other	0	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	934	1284.36	86.13	7%	23%	46%	24%	2%	0%
Migrant	4	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
ELL									
Non-ELL	911	1283.32	86.71	7%	24%	45%	24%	2%	0%
ELL	27	1317.33	44.80	0%	0%	70%	30%	0%	0%
Other	0	*	*	*	*	*	*	*	*

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		Scale Score		% at Performance Level					
	N	***M***	***SD***	**FFBS**	**AS**	**MS**	**ES**	**NR**	**INV**
Grade 7									
Total	1023	1296.49	88.18	8%	18%	45%	29%	2%	0%
Ethnic Background									
White	385	1296.01	92.05	8%	18%	45%	29%	2%	0%
Black	76	1302.21	82.65	7%	12%	51%	30%	1%	0%
Hispanic	434	1298.47	87.06	6%	18%	45%	31%	2%	0%
American Indian	71	1295.30	80.20	10%	18%	42%	30%	0%	0%
Asian	37	1278.89	64.73	5%	24%	51%	19%	0%	0%
Hawaiian Pacific Islander	1	*	*	*	*	*	*	*	*
Multiracial	17	1313.29	87.51	6%	12%	53%	29%	0%	0%
Other	2	*	*	*	*	*	*	*	*
Gender									
Male	633	1295.09	89.08	7%	20%	45%	28%	2%	0%
Female	390	1298.75	86.75	8%	15%	46%	32%	2%	0%
Need									
Autism	222	1289.14	86.44	5%	27%	45%	23%	0%	0%
DD	0	*	*	*	*	*	*	*	*
ED	10	*	*	*	*	*	*	*	*
EDP	11	1312.55	47.12	0%	0%	64%	36%	0%	0%
HI	5	*	*	*	*	*	*	*	*
MD	21	1288.76	78.57	5%	10%	71%	14%	5%	0%
MDSSI	59	1189.41	88.79	41%	31%	27%	2%	10%	0%
MIMR	369	1341.20	57.86	0%	4%	49%	47%	0%	0%
MOMR	145	1270.58	63.70	4%	32%	53%	10%	1%	0%
OHI	22	1337.09	54.16	0%	5%	59%	36%	0%	0%
OI	74	1258.30	95.26	16%	30%	34%	20%	3%	0%
SLD	39	1360.79	58.11	0%	3%	38%	59%	0%	0%
SLI	5	*	*	*	*	*	*	*	*
SMR	37	1142.95	84.73	57%	41%	3%	0%	19%	0%
VI	3	*	*	*	*	*	*	*	*
Other	1	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	643	1306.58	83.27	5%	15%	47%	32%	1%	0%
No Lunch Assistance	378	1280.28	93.05	11%	22%	42%	24%	3%	0%
Other	2	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	1016	1296.83	88.07	7%	18%	45%	29%	2%	0%
Migrant	5	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
ELL									
Non-ELL	991	1295.61	88.27	8%	18%	45%	29%	2%	0%
ELL	30	1337.73	62.92	0%	3%	53%	43%	0%	0%
Other	2	*	*	*	*	*	*	*	*

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		Scale Score		% at Performance Level					
	N	***M***	***SD***	**FFBS**	**AS**	**MS**	**ES**	**NR**	**INV**
Grade 8									
Total	976	1291.60	81.64	6%	16%	54%	24%	2%	0%
Ethnic Background									
White	382	1290.92	90.09	9%	14%	53%	24%	3%	1%
Black	75	1299.71	66.86	3%	15%	59%	24%	0%	0%
Hispanic	403	1292.49	77.34	4%	17%	53%	26%	2%	0%
American Indian	78	1292.63	72.82	4%	17%	60%	19%	1%	0%
Asian	22	1268.09	97.58	18%	18%	41%	23%	5%	0%
Hawaiian Pacific Islander	1	*	*	*	*	*	*	*	*
Multiracial	13	1289.31	45.52	8%	8%	77%	8%	0%	0%
Other	2	*	*	*	*	*	*	*	*
Gender									
Male	600	1292.84	78.38	5%	16%	55%	24%	2%	0%
Female	376	1289.62	86.66	8%	16%	52%	24%	2%	0%
Need									
Autism	230	1288.39	74.39	3%	23%	54%	20%	2%	0%
DD	0	*	*	*	*	*	*	*	*
ED	11	1327.73	40.32	0%	0%	55%	45%	0%	0%
EDP	8	*	*	*	*	*	*	*	*
HI	2	*	*	*	*	*	*	*	*
MD	14	1298.71	74.25	0%	21%	50%	29%	0%	0%
MDSSI	72	1198.35	95.96	32%	32%	35%	1%	14%	0%
MIMR	332	1328.85	61.15	0%	3%	58%	38%	0%	1%
MOMR	161	1273.88	46.34	2%	23%	67%	7%	0%	0%
OHI	17	1315.82	96.72	6%	0%	47%	47%	6%	0%
OI	70	1235.74	102.54	27%	26%	39%	9%	7%	0%
SLD	35	1353.94	71.56	0%	3%	43%	54%	0%	3%
SLI	3	*	*	*	*	*	*	*	*
SMR	17	1187.29	71.64	35%	47%	18%	0%	6%	0%
VI	2	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	584	1299.28	75.60	4%	14%	56%	26%	1%	0%
No Lunch Assistance	390	1280.57	88.79	9%	19%	51%	21%	3%	1%
Other	2	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	969	1291.99	81.74	6%	15%	54%	24%	2%	0%
Migrant	5	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
ELL									
Non-ELL	952	1291.38	81.84	6%	16%	53%	24%	2%	0%
ELL	22	1309.50	70.41	5%	5%	73%	18%	0%	0%
Other	2	*	*	*	*	*	*	*	*

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		Scale Score		% at Performance Level					
	N	***M***	***SD***	**FFBS**	**AS**	**MS**	**ES**	**NR**	**INV**
High School									
Total	977	1302.97	94.97	6%	16%	51%	27%	3%	0%
Ethnic Background									
White	419	1311.17	91.18	4%	17%	48%	30%	2%	0%
Black	78	1314.04	90.04	4%	10%	58%	28%	0%	0%
Hispanic	370	1290.80	101.67	9%	17%	50%	24%	4%	0%
American Indian	77	1320.71	76.12	3%	12%	61%	25%	0%	0%
Asian	19	1260.95	113.64	16%	16%	58%	11%	11%	0%
Hawaiian Pacific Islander	1	*	*	*	*	*	*	*	*
Multiracial	12	1285.08	64.64	0%	25%	50%	25%	0%	0%
Other	1	*	*	*	*	*	*	*	*
Gender									
Male	617	1303.35	94.15	6%	16%	51%	27%	2%	0%
Female	360	1302.31	96.48	6%	17%	51%	26%	4%	0%
Need									
Autism	187	1303.42	89.30	3%	21%	52%	24%	1%	0%
DD	0	*	*	*	*	*	*	*	*
ED	12	1388.67	58.62	0%	0%	25%	75%	0%	0%
EDP	17	1353.76	74.87	0%	0%	59%	41%	0%	0%
HI	1	*	*	*	*	*	*	*	*
MD	24	1304.25	67.02	4%	13%	67%	17%	0%	0%
MDSSI	48	1178.46	110.91	38%	35%	27%	0%	19%	0%
MIMR	317	1347.48	65.15	0%	3%	55%	42%	0%	0%
MOMR	170	1259.79	57.84	5%	26%	66%	4%	2%	0%
OHI	29	1378.41	77.38	0%	3%	38%	59%	0%	0%
OI	98	1256.72	92.06	11%	33%	43%	13%	6%	0%
SLD	41	1387.98	76.82	0%	0%	37%	63%	0%	0%
SLI	2	*	*	*	*	*	*	*	*
SMR	29	1158.28	90.73	52%	34%	14%	0%	17%	0%
VI	1	*	*	*	*	*	*	*	*
Other	1	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	564	1306.80	96.66	7%	14%	51%	29%	3%	0%
No Lunch Assistance	412	1298.02	92.40	5%	19%	51%	25%	2%	0%
Other	1	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	971	1303.27	95.07	6%	16%	51%	27%	3%	0%
Migrant	4	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
ELL									
Non-ELL	955	1302.86	95.68	6%	16%	50%	27%	3%	0%
ELL	21	1313.62	51.36	0%	10%	76%	14%	0%	0%
Other	1	*	*	*	*	*	*	*	*

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Table 8.1.1.4
2013 AIMS A State Test Results
Science Grades 4, 8, and 10

		Scale Score		% at Performance Level					
	N	*M*	*SD*	FFBS	AS	MS	ES	NR	INV
Grade 4									
Total	992	1281.33	76.53	6%	19%	54%	20%	2%	0%
Ethnic Background									
White	339	1284.86	75.02	5%	19%	55%	20%	2%	0%
Black	72	1267.93	97.02	11%	25%	46%	18%	4%	0%
Hispanic	464	1281.60	75.37	6%	19%	53%	21%	2%	0%
American Indian	72	1272.93	74.28	8%	15%	63%	14%	3%	0%
Asian	25	1281.12	45.44	0%	24%	60%	16%	0%	0%
Hawaiian Pacific Islander	4	*	*	*	*	*	*	*	*
Multiracial	14	1291.50	62.83	0%	21%	64%	14%	0%	0%
Other	2	*	*	*	*	*	*	*	*
Gender									
Male	656	1280.51	78.40	7%	20%	52%	21%	2%	0%
Female	336	1282.93	71.34	5%	18%	58%	19%	2%	0%
Need									
Autism	300	1275.34	54.83	2%	29%	55%	14%	1%	0%
DD	11	1344.27	65.31	0%	0%	45%	55%	0%	0%
ED	5	*	*	*	*	*	*	*	*
EDP	1	*	*	*	*	*	*	*	*
HI	5	*	*	*	*	*	*	*	*
MD	19	1285.53	50.44	5%	16%	58%	21%	0%	0%
MDSSI	56	1154.39	104.04	54%	29%	18%	0%	18%	0%
MIMR	326	1317.62	51.57	0%	5%	63%	32%	0%	0%
MOMR	133	1258.12	51.34	5%	32%	59%	5%	2%	0%
OHI	17	1348.53	72.70	0%	6%	35%	59%	0%	0%
OI	66	1256.27	80.66	12%	21%	56%	11%	3%	0%
SLD	26	1357.08	59.78	0%	0%	38%	62%	0%	0%
SLI	2	*	*	*	*	*	*	0%	*
SMR	21	1155.81	104.37	43%	43%	14%	0%	19%	0%
VI	4	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	628	1284.40	78.60	6%	18%	53%	23%	2%	0%
No Lunch Assistance	362	1275.84	71.31	6%	22%	56%	15%	1%	0%
Other	2	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	984	1281.36	76.22	6%	19%	54%	20%	2%	0%
Migrant	6	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
ELL									
Non-ELL	948	1281.13	75.89	6%	20%	54%	20%	2%	0%
ELL	42	1284.45	81.31	7%	12%	57%	24%	5%	0%
Other	2	*	*	*	*	*	*	*	*

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		Scale Score		% at Performance Level					
	N	*M*	*SD*	FFBS	AS	MS	ES	NR	INV
Grade 8									
Total	976	1281.39	68.75	5%	16%	56%	23%	2%	0%
Ethnic Background									
White	382	1279.77	77.07	7%	14%	55%	23%	3%	1%
Black	75	1285.95	40.13	1%	11%	63%	25%	0%	0%
Hispanic	403	1282.85	65.49	4%	19%	54%	24%	2%	0%
American Indian	78	1283.56	64.53	5%	19%	62%	14%	1%	0%
Asian	22	1265.05	83.58	9%	23%	55%	14%	5%	0%
Hawaiian Pacific Islander	1	*	*	*	*	*	*	*	*
Multiracial	13	1285.38	34.25	0%	8%	69%	23%	0%	0%
Other	2	*	*	*	*	*	*	*	*
Gender									
Male	600	1283.08	67.94	5%	16%	55%	24%	2%	0%
Female	376	1278.69	70.05	5%	17%	57%	21%	3%	0%
Need									
Autism	230	1279.63	64.00	3%	20%	59%	18%	2%	0%
DD	0	*	*	*	*	*	*	*	*
ED	11	1308.09	36.28	0%	9%	55%	36%	0%	0%
EDP	8	*	*	*	*	*	*	*	*
HI	2	*	*	*	*	*	*	*	*
MD	14	1285.86	37.91	0%	29%	43%	29%	0%	0%
MDSSI	72	1197.76	97.74	28%	40%	31%	1%	15%	0%
MIMR	332	1312.90	47.78	0%	4%	58%	38%	0%	1%
MOMR	161	1269.79	32.60	1%	22%	73%	4%	0%	0%
OHI	17	1300.82	88.30	6%	0%	41%	53%	6%	0%
OI	70	1234.57	87.84	20%	31%	41%	7%	6%	0%
SLD	35	1323.34	32.42	0%	0%	51%	49%	0%	3%
SLI	3	*	*	*	*	*	*	*	*
SMR	17	1191.06	70.94	0%	0%	33%	67%	6%	0%
VI	2	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	584	1287.15	60.68	4%	14%	59%	24%	1%	0%
No Lunch Assistance	390	1273.15	78.63	7%	20%	52%	21%	3%	1%
Other	2	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	969	1281.73	68.84	5%	16%	56%	23%	2%	0%
Migrant	5	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
ELL									
Non-ELL	952	1280.88	68.81	5%	16%	56%	22%	2%	0%
ELL	22	1310.32	60.36	0%	9%	55%	36%	0%	0%
Other	2	*	*	*	*	*	*	*	*

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		Scale Score		% at Performance Level					
	N	***M***	***SD***	**FFBS**	**AS**	**MS**	**ES**	**NR**	**INV**
Grade 10									
Total	859	1269.06	68.73	7%	20%	52%	21%	3%	0%
Ethnic Background									
White	368	1275.45	63.77	5%	18%	54%	22%	2%	0%
Black	71	1279.73	58.25	7%	15%	54%	24%	0%	0%
Hispanic	334	1259.43	77.46	11%	21%	49%	20%	4%	0%
American Indian	58	1283.17	38.75	0%	21%	52%	28%	0%	0%
Asian	16	1228.63	94.90	13%	31%	50%	6%	13%	0%
Hawaiian Pacific Islander	1	*	*	*	*	*	*	*	*
Multiracial	11	1264.82	34.48	0%	27%	64%	9%	0%	0%
Other	0	*	*	*	*	*	*	*	*
Gender									
Male	544	1270.41	68.65	8%	19%	50%	23%	2%	0%
Female	315	1266.73	68.91	6%	20%	55%	19%	3%	0%
Need									
Autism	166	1271.68	59.05	5%	24%	50%	21%	1%	0%
DD	0	*	*	*	*	*	*	*	*
ED	11	1319.09	42.95	0%	0%	55%	45%	0%	0%
EDP	14	1302.93	41.84	0%	7%	57%	36%	0%	0%
HI	0	*	*	*	*	*	*	*	*
MD	21	1272.43	34.35	5%	14%	62%	19%	0%	0%
MDSSI	38	1172.50	108.83	39%	34%	21%	5%	24%	0%
MIMR	285	1295.89	36.81	1%	4%	65%	29%	0%	0%
MOMR	146	1244.21	51.11	8%	38%	51%	3%	2%	0%
OHI	28	1314.04	53.41	0%	4%	50%	46%	0%	0%
OI	86	1239.94	80.54	14%	34%	44%	8%	6%	0%
SLD	36	1327.92	59.30	0%	0%	36%	64%	0%	0%
SLI	1	*	*	*	*	*	*	*	*
SMR	26	1160.12	89.12	46%	50%	4%	0%	19%	0%
VI	1	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	507	1272.27	70.14	7%	17%	51%	24%	3%	0%
No Lunch Assistance	352	1264.44	66.47	7%	23%	53%	17%	3%	0%
Other	0	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	854	1269.19	68.79	7%	20%	52%	21%	3%	0%
Migrant	4	*	*	*	*	*	*	*	*
Other	1	*	*	*	*	*	*	*	*
ELL									
Non-ELL	840	1268.72	69.26	7%	20%	52%	21%	3%	0%
ELL	19	1283.95	36.35	0%	11%	58%	32%	0%	0%
Other	0	*	*	*	*	*	*	*	*

Note: FFBS=Falls Far Below the Standard; AS=Approaches the Standard; MS=Meets the Standard; ES=Exceeds the Standard. These results are not final results and are presented here for purposes of addressing reliability and validity. They should not be used for accountability purposes. * To comply with FERPA regulations, results for subgroups of less than 11 are redacted and marked instead with an *.

Table 8.1.1.5
2013 AIMS A Frequency Distribution Mathematics Grade 3

Raw Score	Scale Score	FREQ	%	CUML %	Raw Score	Scale Score	FREQ	%	CUML %
0	1000	19	2.0%	2.0%	61	1263	11	1.2%	40.8%
1	1025	2	0.2%	2.2%	62	1264	11	1.2%	42.0%
2	1075	0	0.0%	2.2%	63	1264	12	1.3%	43.3%
3	1105	1	0.1%	2.4%	64	1265	13	1.4%	44.6%
4	1125	3	0.3%	2.7%	65	1266	14	1.5%	46.1%
5	1141	1	0.1%	2.8%	66	1267	15	1.6%	47.8%
6	1152	0	0.0%	2.8%	67	1268	7	0.7%	48.5%
7	1162	1	0.1%	2.9%	68	1269	12	1.3%	49.8%
8	1170	6	0.6%	3.5%	69	1270	12	1.3%	51.1%
9	1176	3	0.3%	3.9%	70	1271	16	1.7%	52.8%
10	1182	0	0.0%	3.9%	71	1272	16	1.7%	54.5%
11	1186	1	0.1%	4.0%	72	1273	12	1.3%	55.8%
12	1190	3	0.3%	4.3%	73	1274	13	1.4%	57.2%
13	1194	1	0.1%	4.4%	74	1275	11	1.2%	58.4%
14	1198	0	0.0%	4.4%	75	1276	18	1.9%	60.3%
15	1201	2	0.2%	4.6%	76	1278	9	1.0%	61.2%
16	1203	8	0.9%	5.5%	77	1279	10	1.1%	62.3%
17	1206	5	0.5%	6.0%	78	1280	15	1.6%	63.9%
18	1208	2	0.2%	6.2%	79	1281	12	1.3%	65.2%
19	1211	1	0.1%	6.3%	80	1282	17	1.8%	67.0%
20	1213	5	0.5%	6.9%	81	1283	21	2.2%	69.3%
21	1215	3	0.3%	7.2%	82	1284	8	0.9%	70.1%
22	1217	2	0.2%	7.4%	83	1285	8	0.9%	71.0%
23	1219	0	0.0%	7.4%	84	1286	9	1.0%	71.9%
24	1220	10	1.1%	8.5%	85	1288	10	1.1%	73.0%
25	1222	2	0.2%	8.7%	86	1289	7	0.7%	73.8%
26	1224	2	0.2%	8.9%	87	1290	17	1.8%	75.6%
27	1225	4	0.4%	9.3%	88	1292	14	1.5%	77.1%
28	1227	5	0.5%	9.9%	89	1293	6	0.6%	77.7%
29	1228	4	0.4%	10.3%	90	1294	12	1.3%	79.0%
30	1229	4	0.4%	10.7%	91	1296	8	0.9%	79.9%
31	1231	2	0.2%	10.9%	92	1297	6	0.6%	80.5%
32	1232	6	0.6%	11.6%	93	1299	20	2.1%	82.7%
33	1233	8	0.9%	12.4%	94	1300	12	1.3%	83.9%
34	1235	6	0.6%	13.1%	95	1302	11	1.2%	85.1%
35	1236	5	0.5%	13.6%	96	1303	13	1.4%	86.5%
36	1237	6	0.6%	14.2%	97	1305	11	1.2%	87.7%
37	1238	6	0.6%	14.9%	98	1307	6	0.6%	88.3%
38	1239	7	0.7%	15.6%	99	1309	10	1.1%	89.4%
39	1240	8	0.9%	16.5%	100	1311	8	0.9%	90.3%
40	1242	9	1.0%	17.5%	101	1313	10	1.1%	91.3%
41	1243	5	0.5%	18.0%	102	1315	9	1.0%	92.3%
42	1244	6	0.6%	18.6%	103	1317	6	0.6%	92.9%
43	1245	9	1.0%	19.6%	104	1319	3	0.3%	93.3%
44	1246	5	0.5%	20.1%	105	1322	11	1.2%	94.4%
45	1247	5	0.5%	20.7%	106	1325	9	1.0%	95.4%
46	1248	12	1.3%	21.9%	107	1328	8	0.9%	96.3%
47	1249	14	1.5%	23.4%	108	1331	3	0.3%	96.6%
48	1250	11	1.2%	24.6%	109	1334	4	0.4%	97.0%
49	1251	9	1.0%	25.6%	110	1338	5	0.5%	97.5%
50	1252	10	1.1%	26.7%	111	1343	5	0.5%	98.1%
51	1253	13	1.4%	28.1%	112	1347	4	0.4%	98.5%
52	1254	12	1.3%	29.3%	113	1353	1	0.1%	98.6%
53	1255	13	1.4%	30.7%	114	1360	6	0.6%	99.3%
54	1256	10	1.1%	31.8%	115	1368	1	0.1%	99.4%
55	1257	15	1.6%	33.4%	116	1378	2	0.2%	99.6%
56	1258	11	1.2%	34.6%	117	1391	2	0.2%	99.8%
57	1259	9	1.0%	35.5%	118	1412	0	0.0%	99.8%
58	1260	13	1.4%	36.9%	119	1450	2	0.2%	100.0%
59	1261	13	1.4%	38.3%	120	1500	0	0.0%	100.0%
60	1262	12	1.3%	39.6%					

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 8.1.1.6
2013 AIMS A Frequency Distribution Mathematics Grade 4

Raw Score	Scale Score	FREQ	%	CUML %	Raw Score	Scale Score	FREQ	%	CUML %
0	1000	25	2.5%	2.5%	61	1259	17	1.7%	36.9%
1	1000	2	0.2%	2.7%	62	1260	10	1.0%	37.9%
2	1053	1	0.1%	2.8%	63	1261	7	0.7%	38.6%
3	1085	1	0.1%	2.9%	64	1262	12	1.2%	39.8%
4	1107	3	0.3%	3.2%	65	1263	13	1.3%	41.1%
5	1124	1	0.1%	3.3%	66	1264	18	1.8%	42.9%
6	1137	1	0.1%	3.4%	67	1265	18	1.8%	44.8%
7	1147	0	0.0%	3.4%	68	1266	13	1.3%	46.1%
8	1155	3	0.3%	3.7%	69	1268	10	1.0%	47.1%
9	1163	0	0.0%	3.7%	70	1269	15	1.5%	48.6%
10	1169	1	0.1%	3.8%	71	1270	7	0.7%	49.3%
11	1174	0	0.0%	3.8%	72	1271	12	1.2%	50.5%
12	1179	5	0.5%	4.3%	73	1272	14	1.4%	51.9%
13	1183	4	0.4%	4.7%	74	1273	8	0.8%	52.7%
14	1187	2	0.2%	4.9%	75	1274	11	1.1%	53.8%
15	1190	2	0.2%	5.1%	76	1275	11	1.1%	54.9%
16	1194	1	0.1%	5.2%	77	1276	15	1.5%	56.5%
17	1197	3	0.3%	5.5%	78	1277	10	1.0%	57.5%
18	1199	2	0.2%	5.7%	79	1278	19	1.9%	59.4%
19	1202	4	0.4%	6.1%	80	1280	10	1.0%	60.4%
20	1204	4	0.4%	6.6%	81	1281	11	1.1%	61.5%
21	1207	1	0.1%	6.7%	82	1282	8	0.8%	62.3%
22	1209	3	0.3%	7.0%	83	1283	10	1.0%	63.3%
23	1211	3	0.3%	7.3%	84	1285	14	1.4%	64.7%
24	1213	7	0.7%	8.0%	85	1286	7	0.7%	65.4%
25	1215	4	0.4%	8.4%	86	1287	11	1.1%	66.5%
26	1216	6	0.6%	9.0%	87	1288	17	1.7%	68.2%
27	1218	3	0.3%	9.3%	88	1290	10	1.0%	69.3%
28	1220	6	0.6%	9.9%	89	1291	7	0.7%	70.0%
29	1221	4	0.4%	10.3%	90	1293	15	1.5%	71.5%
30	1223	2	0.2%	10.5%	91	1294	15	1.5%	73.0%
31	1225	2	0.2%	10.7%	92	1296	6	0.6%	73.6%
32	1226	6	0.6%	11.3%	93	1297	9	0.9%	74.5%
33	1227	3	0.3%	11.6%	94	1299	15	1.5%	76.0%
34	1229	3	0.3%	11.9%	95	1301	14	1.4%	77.4%
35	1230	8	0.8%	12.7%	96	1302	14	1.4%	78.8%
36	1231	8	0.8%	13.5%	97	1304	13	1.3%	80.1%
37	1233	3	0.3%	13.8%	98	1306	9	0.9%	81.0%
38	1234	2	0.2%	14.0%	99	1308	8	0.8%	81.9%
39	1235	2	0.2%	14.2%	100	1310	13	1.3%	83.2%
40	1236	6	0.6%	14.8%	101	1313	12	1.2%	84.4%
41	1238	11	1.1%	15.9%	102	1315	8	0.8%	85.2%
42	1239	5	0.5%	16.4%	103	1317	7	0.7%	85.9%
43	1240	10	1.0%	17.4%	104	1320	6	0.6%	86.5%
44	1241	10	1.0%	18.4%	105	1323	9	0.9%	87.4%
45	1242	15	1.5%	20.0%	106	1326	10	1.0%	88.4%
46	1243	7	0.7%	20.7%	107	1329	12	1.2%	89.6%
47	1245	8	0.8%	21.5%	108	1333	13	1.3%	90.9%
48	1246	9	0.9%	22.4%	109	1336	9	0.9%	91.8%
49	1247	13	1.3%	23.7%	110	1341	12	1.2%	93.0%
50	1248	14	1.4%	25.1%	111	1345	10	1.0%	94.1%
51	1249	8	0.8%	25.9%	112	1351	5	0.5%	94.6%
52	1250	11	1.1%	27.0%	113	1357	6	0.6%	95.2%
53	1251	9	0.9%	27.9%	114	1364	11	1.1%	96.3%
54	1252	9	0.9%	28.8%	115	1372	9	0.9%	97.2%
55	1253	10	1.0%	29.8%	116	1383	7	0.7%	97.9%
56	1254	6	0.6%	30.4%	117	1397	2	0.2%	98.1%
57	1255	16	1.6%	32.1%	118	1419	7	0.7%	98.8%
58	1256	10	1.0%	33.1%	119	1459	6	0.6%	99.4%
59	1257	10	1.0%	34.1%	120	1500	6	0.6%	100.0%
60	1258	11	1.1%	35.2%	120	1500	6	0.6%	100.0%

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 8.1.1.7
2013 AIMS A Frequency Distribution Mathematics Grade 5

Raw Score	Scale Score	FREQ	%	CUML %	Raw Score	Scale Score	FREQ	%	CUML %
0	1000	24	2.5%	2.5%	61	1259	14	1.5%	33.5%
1	1001	0	0.0%	2.5%	62	1260	11	1.1%	34.7%
2	1053	1	0.1%	2.6%	63	1261	11	1.1%	35.8%
3	1084	0	0.0%	2.6%	64	1262	8	0.8%	36.6%
4	1105	4	0.4%	3.0%	65	1263	11	1.1%	37.8%
5	1121	1	0.1%	3.1%	66	1264	17	1.8%	39.6%
6	1133	0	0.0%	3.1%	67	1265	14	1.5%	41.0%
7	1144	0	0.0%	3.1%	68	1266	15	1.6%	42.6%
8	1152	5	0.5%	3.7%	69	1267	14	1.5%	44.1%
9	1160	1	0.1%	3.8%	70	1268	9	0.9%	45.0%
10	1166	0	0.0%	3.8%	71	1269	8	0.8%	45.8%
11	1172	0	0.0%	3.8%	72	1270	15	1.6%	47.4%
12	1176	3	0.3%	4.1%	73	1271	12	1.3%	48.6%
13	1181	2	0.2%	4.3%	74	1272	12	1.3%	49.9%
14	1185	0	0.0%	4.3%	75	1273	12	1.3%	51.1%
15	1189	0	0.0%	4.3%	76	1274	17	1.8%	52.9%
16	1192	4	0.4%	4.7%	77	1275	30	3.1%	56.1%
17	1195	2	0.2%	4.9%	78	1276	11	1.1%	57.2%
18	1198	2	0.2%	5.1%	79	1277	18	1.9%	59.1%
19	1201	2	0.2%	5.3%	80	1278	15	1.6%	60.6%
20	1203	5	0.5%	5.8%	81	1280	23	2.4%	63.0%
21	1205	3	0.3%	6.2%	82	1281	13	1.4%	64.4%
22	1208	2	0.2%	6.4%	83	1282	23	2.4%	66.8%
23	1210	1	0.1%	6.5%	84	1283	12	1.3%	68.1%
24	1212	6	0.6%	7.1%	85	1284	23	2.4%	70.5%
25	1214	3	0.3%	7.4%	86	1285	11	1.1%	71.6%
26	1216	3	0.3%	7.7%	87	1286	14	1.5%	73.1%
27	1217	4	0.4%	8.1%	88	1288	23	2.4%	75.5%
28	1219	7	0.7%	8.9%	89	1289	21	2.2%	77.7%
29	1221	4	0.4%	9.3%	90	1290	16	1.7%	79.3%
30	1222	2	0.2%	9.5%	91	1291	14	1.5%	80.8%
31	1224	1	0.1%	9.6%	92	1293	17	1.8%	82.6%
32	1225	7	0.7%	10.3%	93	1294	12	1.3%	83.8%
33	1227	5	0.5%	10.9%	94	1296	11	1.1%	85.0%
34	1228	6	0.6%	11.5%	95	1297	15	1.6%	86.5%
35	1230	2	0.2%	11.7%	96	1299	13	1.4%	87.9%
36	1231	6	0.6%	12.3%	97	1300	10	1.0%	88.9%
37	1232	4	0.4%	12.7%	98	1302	9	0.9%	89.9%
38	1234	4	0.4%	13.2%	99	1303	7	0.7%	90.6%
39	1235	6	0.6%	13.8%	100	1305	4	0.4%	91.0%
40	1236	3	0.3%	14.1%	101	1307	12	1.3%	92.3%
41	1237	3	0.3%	14.4%	102	1309	5	0.5%	92.8%
42	1239	10	1.0%	15.4%	103	1311	7	0.7%	93.5%
43	1240	4	0.4%	15.9%	104	1313	10	1.0%	94.6%
44	1241	6	0.6%	16.5%	105	1316	9	0.9%	95.5%
45	1242	3	0.3%	16.8%	106	1318	5	0.5%	96.0%
46	1243	4	0.4%	17.2%	107	1321	4	0.4%	96.5%
47	1244	11	1.1%	18.4%	108	1324	5	0.5%	97.0%
48	1245	9	0.9%	19.3%	109	1328	3	0.3%	97.3%
49	1247	12	1.3%	20.6%	110	1331	6	0.6%	97.9%
50	1248	8	0.8%	21.4%	111	1335	6	0.6%	98.5%
51	1249	7	0.7%	22.1%	112	1340	3	0.3%	98.9%
52	1250	8	0.8%	23.0%	113	1346	0	0.0%	98.9%
53	1251	14	1.5%	24.4%	114	1353	4	0.4%	99.3%
54	1252	8	0.8%	25.3%	115	1361	0	0.0%	99.3%
55	1253	11	1.1%	26.4%	116	1372	1	0.1%	99.4%
56	1254	13	1.4%	27.8%	117	1386	2	0.2%	99.6%
57	1255	8	0.8%	28.6%	118	1409	2	0.2%	99.8%
58	1256	20	2.1%	30.7%	119	1452	1	0.1%	99.9%
59	1257	4	0.4%	31.1%	120	1500	1	0.1%	100.0%
60	1258	9	0.9%	32.0%					

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 8.1.1.8
2013 AIMS A Frequency Distribution Mathematics Grade 6

Raw Score	Scale Score	FREQ	%	CUML %	Raw Score	Scale Score	FREQ	%	CUML %
0	1000	22	2.3%	2.3%	61	1252	9	1.0%	31.6%
1	1000	0	0.0%	2.3%	62	1254	11	1.2%	32.7%
2	1000	1	0.1%	2.5%	63	1255	11	1.2%	33.9%
3	1000	1	0.1%	2.6%	64	1257	12	1.3%	35.2%
4	1006	6	0.6%	3.2%	65	1258	13	1.4%	36.6%
5	1031	0	0.0%	3.2%	66	1260	8	0.9%	37.4%
6	1051	0	0.0%	3.2%	67	1261	9	1.0%	38.4%
7	1067	0	0.0%	3.2%	68	1263	11	1.2%	39.6%
8	1081	2	0.2%	3.4%	69	1264	18	1.9%	41.5%
9	1093	1	0.1%	3.5%	70	1266	11	1.2%	42.6%
10	1103	0	0.0%	3.5%	71	1267	10	1.1%	43.7%
11	1112	0	0.0%	3.5%	72	1269	20	2.1%	45.8%
12	1120	8	0.9%	4.4%	73	1270	15	1.6%	47.4%
13	1127	1	0.1%	4.5%	74	1272	14	1.5%	48.9%
14	1134	4	0.4%	4.9%	75	1273	17	1.8%	50.7%
15	1140	0	0.0%	4.9%	76	1275	16	1.7%	52.5%
16	1145	5	0.5%	5.4%	77	1277	18	1.9%	54.4%
17	1150	0	0.0%	5.4%	78	1278	19	2.0%	56.4%
18	1155	3	0.3%	5.8%	79	1280	18	1.9%	58.3%
19	1160	3	0.3%	6.1%	80	1282	14	1.5%	59.8%
20	1164	2	0.2%	6.3%	81	1283	13	1.4%	61.2%
21	1168	4	0.4%	6.7%	82	1285	17	1.8%	63.0%
22	1171	0	0.0%	6.7%	83	1287	16	1.7%	64.7%
23	1175	1	0.1%	6.8%	84	1288	16	1.7%	66.4%
24	1178	2	0.2%	7.0%	85	1290	18	1.9%	68.3%
25	1181	2	0.2%	7.2%	86	1292	15	1.6%	69.9%
26	1184	1	0.1%	7.4%	87	1294	14	1.5%	71.4%
27	1187	4	0.4%	7.8%	88	1296	17	1.8%	73.2%
28	1190	6	0.6%	8.4%	89	1298	14	1.5%	74.7%
29	1193	2	0.2%	8.6%	90	1300	11	1.2%	75.9%
30	1195	5	0.5%	9.2%	91	1302	11	1.2%	77.1%
31	1198	5	0.5%	9.7%	92	1304	15	1.6%	78.7%
32	1200	4	0.4%	10.1%	93	1306	12	1.3%	80.0%
33	1202	3	0.3%	10.4%	94	1308	16	1.7%	81.7%
34	1205	5	0.5%	11.0%	95	1311	15	1.6%	83.3%
35	1207	3	0.3%	11.3%	96	1313	15	1.6%	84.9%
36	1209	4	0.4%	11.7%	97	1315	14	1.5%	86.4%
37	1211	6	0.6%	12.4%	98	1318	9	1.0%	87.3%
38	1213	4	0.4%	12.8%	99	1321	8	0.9%	88.2%
39	1215	3	0.3%	13.1%	100	1324	13	1.4%	89.6%
40	1217	7	0.7%	13.9%	101	1327	14	1.5%	91.0%
41	1219	2	0.2%	14.1%	102	1330	15	1.6%	92.6%
42	1221	6	0.6%	14.7%	103	1333	8	0.9%	93.5%
43	1223	5	0.5%	15.2%	104	1337	6	0.6%	94.1%
44	1224	9	1.0%	16.2%	105	1340	3	0.3%	94.5%
45	1226	5	0.5%	16.7%	106	1345	6	0.6%	95.1%
46	1228	9	1.0%	17.7%	107	1349	4	0.4%	95.5%
47	1230	12	1.3%	19.0%	108	1354	7	0.7%	96.3%
48	1231	6	0.6%	19.6%	109	1359	8	0.9%	97.1%
49	1233	4	0.4%	20.0%	110	1365	8	0.9%	98.0%
50	1235	11	1.2%	21.2%	111	1372	3	0.3%	98.3%
51	1236	10	1.1%	22.3%	112	1380	4	0.4%	98.7%
52	1238	3	0.3%	22.6%	113	1389	4	0.4%	99.1%
53	1240	6	0.6%	23.2%	114	1399	2	0.2%	99.4%
54	1241	7	0.7%	24.0%	115	1412	2	0.2%	99.6%
55	1243	11	1.2%	25.2%	116	1429	1	0.1%	99.7%
56	1244	7	0.7%	25.9%	117	1452	1	0.1%	99.8%
57	1246	11	1.2%	27.1%	118	1487	2	0.2%	100.0%
58	1247	11	1.2%	28.3%	119	1500	0	0.0%	100.0%
59	1249	7	0.7%	29.0%	120	1500	0	0.0%	100.0%
60	1250	15	1.6%	30.6%					

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 8.1.1.9
2013 AIMS A Frequency Distribution Mathematics Grade 7

Raw Score	Scale Score	FREQ	%	CUML %	Raw Score	Scale Score	FREQ	%	CUML %
0	1000	16	1.6%	1.6%	61	1263	13	1.3%	32.3%
1	1000	2	0.2%	1.8%	62	1264	7	0.7%	32.9%
2	1000	0	0.0%	1.8%	63	1266	7	0.7%	33.6%
3	1010	2	0.2%	2.0%	64	1267	5	0.5%	34.1%
4	1040	1	0.1%	2.1%	65	1269	12	1.2%	35.3%
5	1063	1	0.1%	2.2%	66	1270	13	1.3%	36.6%
6	1081	0	0.0%	2.2%	67	1271	16	1.6%	38.1%
7	1096	0	0.0%	2.2%	68	1273	16	1.6%	39.7%
8	1108	4	0.4%	2.5%	69	1274	13	1.3%	41.0%
9	1119	1	0.1%	2.6%	70	1276	16	1.6%	42.5%
10	1128	4	0.4%	3.0%	71	1277	6	0.6%	43.1%
11	1135	1	0.1%	3.1%	72	1278	15	1.5%	44.6%
12	1142	3	0.3%	3.4%	73	1280	10	1.0%	45.6%
13	1149	1	0.1%	3.5%	74	1281	8	0.8%	46.3%
14	1155	0	0.0%	3.5%	75	1283	13	1.3%	47.6%
15	1160	3	0.3%	3.8%	76	1284	13	1.3%	48.9%
16	1165	2	0.2%	4.0%	77	1286	15	1.5%	50.3%
17	1169	2	0.2%	4.2%	78	1287	13	1.3%	51.6%
18	1173	2	0.2%	4.4%	79	1289	6	0.6%	52.2%
19	1177	2	0.2%	4.6%	80	1290	13	1.3%	53.5%
20	1181	7	0.7%	5.3%	81	1292	15	1.5%	54.9%
21	1184	4	0.4%	5.7%	82	1293	16	1.6%	56.5%
22	1188	2	0.2%	5.9%	83	1295	12	1.2%	57.7%
23	1191	2	0.2%	6.1%	84	1296	12	1.2%	58.8%
24	1194	5	0.5%	6.5%	85	1298	15	1.5%	60.3%
25	1197	5	0.5%	7.0%	86	1300	15	1.5%	61.8%
26	1200	5	0.5%	7.5%	87	1301	12	1.2%	63.0%
27	1202	2	0.2%	7.7%	88	1303	16	1.6%	64.5%
28	1205	3	0.3%	8.0%	89	1305	15	1.5%	66.0%
29	1207	3	0.3%	8.3%	90	1307	14	1.4%	67.4%
30	1210	7	0.7%	9.0%	91	1309	12	1.2%	68.5%
31	1212	1	0.1%	9.1%	92	1311	20	2.0%	70.5%
32	1214	6	0.6%	9.7%	93	1313	19	1.9%	72.3%
33	1216	3	0.3%	10.0%	94	1315	8	0.8%	73.1%
34	1219	4	0.4%	10.4%	95	1317	14	1.4%	74.5%
35	1221	4	0.4%	10.8%	96	1319	12	1.2%	75.7%
36	1223	8	0.8%	11.5%	97	1321	20	2.0%	77.6%
37	1225	2	0.2%	11.7%	98	1324	21	2.1%	79.7%
38	1226	2	0.2%	11.9%	99	1326	8	0.8%	80.4%
39	1228	8	0.8%	12.7%	100	1329	16	1.6%	82.0%
40	1230	6	0.6%	13.3%	101	1331	18	1.8%	83.8%
41	1232	9	0.9%	14.2%	102	1334	20	2.0%	85.7%
42	1234	5	0.5%	14.7%	103	1337	12	1.2%	86.9%
43	1235	8	0.8%	15.4%	104	1341	9	0.9%	87.8%
44	1237	7	0.7%	16.1%	105	1344	11	1.1%	88.9%
45	1239	10	1.0%	17.1%	106	1348	7	0.7%	89.5%
46	1240	9	0.9%	18.0%	107	1352	12	1.2%	90.7%
47	1242	11	1.1%	19.1%	108	1356	13	1.3%	92.0%
48	1244	8	0.8%	19.8%	109	1361	11	1.1%	93.1%
49	1245	7	0.7%	20.5%	110	1367	13	1.3%	94.3%
50	1247	11	1.1%	21.6%	111	1373	12	1.2%	95.5%
51	1248	12	1.2%	22.8%	112	1380	11	1.1%	96.6%
52	1250	4	0.4%	23.2%	113	1388	8	0.8%	97.4%
53	1251	14	1.4%	24.5%	114	1397	6	0.6%	97.9%
54	1253	10	1.0%	25.5%	115	1409	6	0.6%	98.5%
55	1254	13	1.3%	26.8%	116	1424	6	0.6%	99.1%
56	1256	11	1.1%	27.9%	117	1444	3	0.3%	99.4%
57	1257	11	1.1%	28.9%	118	1475	3	0.3%	99.7%
58	1259	5	0.5%	29.4%	119	1500	2	0.2%	99.9%
59	1260	7	0.7%	30.1%	120	1500	1	0.1%	100.0%
60	1262	9	0.9%	31.0%					

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 8.1.1.10
2013 AIMS A Frequency Distribution Mathematics Grade 8

Raw Score	Scale Score	FREQ	%	CUML %	Raw Score	Scale Score	FREQ	%	CUML %
0	1000	25	2.6%	2.6%	61	1262	2	0.2%	34.8%
1	1000	0	0.0%	2.6%	62	1263	13	1.3%	36.2%
2	1000	0	0.0%	2.6%	63	1265	8	0.8%	37.0%
3	1019	0	0.0%	2.6%	64	1266	11	1.1%	38.1%
4	1049	3	0.3%	2.9%	65	1267	16	1.6%	39.8%
5	1071	0	0.0%	2.9%	66	1269	11	1.1%	40.9%
6	1088	2	0.2%	3.1%	67	1270	7	0.7%	41.6%
7	1103	0	0.0%	3.1%	68	1271	14	1.4%	43.0%
8	1115	3	0.3%	3.4%	69	1273	22	2.3%	45.3%
9	1125	0	0.0%	3.4%	70	1274	8	0.8%	46.1%
10	1133	0	0.0%	3.4%	71	1275	11	1.1%	47.2%
11	1141	1	0.1%	3.5%	72	1277	16	1.6%	48.9%
12	1148	2	0.2%	3.7%	73	1278	13	1.3%	50.2%
13	1154	0	0.0%	3.7%	74	1279	11	1.1%	51.3%
14	1160	0	0.0%	3.7%	75	1281	8	0.8%	52.2%
15	1165	3	0.3%	4.0%	76	1282	13	1.3%	53.5%
16	1170	4	0.4%	4.4%	77	1283	17	1.7%	55.2%
17	1174	1	0.1%	4.5%	78	1285	17	1.7%	57.0%
18	1178	0	0.0%	4.5%	79	1286	20	2.0%	59.0%
19	1182	2	0.2%	4.7%	80	1288	17	1.7%	60.8%
20	1185	6	0.6%	5.3%	81	1289	6	0.6%	61.4%
21	1189	3	0.3%	5.6%	82	1291	13	1.3%	62.7%
22	1192	2	0.2%	5.8%	83	1292	15	1.5%	64.2%
23	1195	3	0.3%	6.1%	84	1294	18	1.8%	66.1%
24	1198	2	0.2%	6.4%	85	1295	12	1.2%	67.3%
25	1201	5	0.5%	6.9%	86	1297	14	1.4%	68.8%
26	1203	2	0.2%	7.1%	87	1298	17	1.7%	70.5%
27	1206	3	0.3%	7.4%	88	1300	5	0.5%	71.0%
28	1208	2	0.2%	7.6%	89	1302	15	1.5%	72.5%
29	1210	3	0.3%	7.9%	90	1303	14	1.4%	74.0%
30	1213	5	0.5%	8.4%	91	1305	18	1.8%	75.8%
31	1215	5	0.5%	8.9%	92	1307	13	1.3%	77.2%
32	1217	5	0.5%	9.4%	93	1309	16	1.6%	78.8%
33	1219	5	0.5%	9.9%	94	1311	10	1.0%	79.8%
34	1221	7	0.7%	10.7%	95	1313	12	1.2%	81.0%
35	1223	5	0.5%	11.2%	96	1315	9	0.9%	82.0%
36	1225	1	0.1%	11.3%	97	1317	17	1.7%	83.7%
37	1226	7	0.7%	12.0%	98	1319	18	1.8%	85.6%
38	1228	4	0.4%	12.4%	99	1321	20	2.0%	87.6%
39	1230	11	1.1%	13.5%	100	1324	8	0.8%	88.4%
40	1232	7	0.7%	14.2%	101	1326	10	1.0%	89.4%
41	1233	5	0.5%	14.8%	102	1329	8	0.8%	90.3%
42	1235	8	0.8%	15.6%	103	1332	8	0.8%	91.1%
43	1236	9	0.9%	16.5%	104	1335	9	0.9%	92.0%
44	1238	9	0.9%	17.4%	105	1338	8	0.8%	92.8%
45	1240	6	0.6%	18.0%	106	1342	11	1.1%	94.0%
46	1241	12	1.2%	19.3%	107	1345	6	0.6%	94.6%
47	1243	9	0.9%	20.2%	108	1349	2	0.2%	94.8%
48	1244	17	1.7%	21.9%	109	1354	3	0.3%	95.1%
49	1246	11	1.1%	23.1%	110	1359	7	0.7%	95.8%
50	1247	9	0.9%	24.0%	111	1364	4	0.4%	96.2%
51	1248	10	1.0%	25.0%	112	1371	7	0.7%	96.9%
52	1250	15	1.5%	26.5%	113	1378	5	0.5%	97.4%
53	1251	14	1.4%	28.0%	114	1387	5	0.5%	98.0%
54	1253	14	1.4%	29.4%	115	1398	6	0.6%	98.6%
55	1254	5	0.5%	29.9%	116	1412	8	0.8%	99.4%
56	1255	10	1.0%	30.9%	117	1431	0	0.0%	99.4%
57	1257	11	1.1%	32.1%	118	1460	2	0.2%	99.6%
58	1258	10	1.0%	33.1%	119	1500	2	0.2%	99.8%
59	1259	6	0.6%	33.7%	120	1500	2	0.2%	100.0%
60	1261	9	0.9%	34.6%					

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 8.1.1.11
2013 AIMS A Frequency Distribution Mathematics High School

Raw Score	Scale Score	FREQ	%	CUML %	Raw Score	Scale Score	FREQ	%	CUML %
0	1000	27	2.8%	2.8%	61	1270	10	1.0%	40.7%
1	1000	1	0.1%	2.9%	62	1271	10	1.0%	41.8%
2	1000	0	0.0%	2.9%	63	1273	14	1.4%	43.2%
3	1021	3	0.3%	3.2%	64	1274	11	1.1%	44.3%
4	1052	5	0.5%	3.7%	65	1276	12	1.2%	45.5%
5	1075	0	0.0%	3.7%	66	1277	18	1.8%	47.4%
6	1093	0	0.0%	3.7%	67	1279	13	1.3%	48.7%
7	1108	0	0.0%	3.7%	68	1280	14	1.4%	50.2%
8	1120	2	0.2%	3.9%	69	1282	14	1.4%	51.6%
9	1130	0	0.0%	3.9%	70	1283	16	1.6%	53.2%
10	1139	0	0.0%	3.9%	71	1285	11	1.1%	54.4%
11	1147	2	0.2%	4.1%	72	1286	12	1.2%	55.6%
12	1153	7	0.7%	4.8%	73	1288	16	1.6%	57.2%
13	1160	3	0.3%	5.1%	74	1289	14	1.4%	58.6%
14	1165	0	0.0%	5.1%	75	1291	19	1.9%	60.6%
15	1170	2	0.2%	5.3%	76	1292	14	1.4%	62.0%
16	1175	7	0.7%	6.0%	77	1294	16	1.6%	63.7%
17	1179	1	0.1%	6.1%	78	1296	14	1.4%	65.1%
18	1183	1	0.1%	6.2%	79	1297	12	1.2%	66.3%
19	1187	2	0.2%	6.4%	80	1299	21	2.1%	68.5%
20	1191	4	0.4%	6.9%	81	1301	15	1.5%	70.0%
21	1194	1	0.1%	7.0%	82	1302	16	1.6%	71.6%
22	1197	4	0.4%	7.4%	83	1304	10	1.0%	72.7%
23	1200	2	0.2%	7.6%	84	1306	15	1.5%	74.2%
24	1203	5	0.5%	8.1%	85	1308	16	1.6%	75.8%
25	1206	3	0.3%	8.4%	86	1309	13	1.3%	77.2%
26	1208	1	0.1%	8.5%	87	1311	15	1.5%	78.7%
27	1211	3	0.3%	8.8%	88	1313	12	1.2%	79.9%
28	1213	8	0.8%	9.6%	89	1315	10	1.0%	81.0%
29	1216	4	0.4%	10.0%	90	1317	10	1.0%	82.0%
30	1218	7	0.7%	10.7%	91	1319	14	1.4%	83.4%
31	1220	14	1.4%	12.2%	92	1321	14	1.4%	84.9%
32	1222	6	0.6%	12.8%	93	1324	14	1.4%	86.3%
33	1224	6	0.6%	13.4%	94	1326	4	0.4%	86.7%
34	1226	5	0.5%	13.9%	95	1328	12	1.2%	87.9%
35	1228	7	0.7%	14.6%	96	1331	12	1.2%	89.2%
36	1230	8	0.8%	15.5%	97	1333	9	0.9%	90.1%
37	1232	8	0.8%	16.3%	98	1336	16	1.6%	91.7%
38	1234	7	0.7%	17.0%	99	1338	3	0.3%	92.0%
39	1236	10	1.0%	18.0%	100	1341	7	0.7%	92.7%
40	1237	6	0.6%	18.6%	101	1344	5	0.5%	93.2%
41	1239	18	1.8%	20.5%	102	1347	9	0.9%	94.2%
42	1241	6	0.6%	21.1%	103	1351	11	1.1%	95.3%
43	1242	7	0.7%	21.8%	104	1354	4	0.4%	95.7%
44	1244	6	0.6%	22.4%	105	1358	2	0.2%	95.9%
45	1246	10	1.0%	23.4%	106	1362	9	0.9%	96.8%
46	1247	8	0.8%	24.3%	107	1367	6	0.6%	97.4%
47	1249	14	1.4%	25.7%	108	1371	8	0.8%	98.3%
48	1250	13	1.3%	27.0%	109	1376	1	0.1%	98.4%
49	1252	9	0.9%	27.9%	110	1382	3	0.3%	98.7%
50	1254	4	0.4%	28.4%	111	1389	6	0.6%	99.3%
51	1255	13	1.3%	29.7%	112	1396	1	0.1%	99.4%
52	1257	12	1.2%	30.9%	113	1404	0	0.0%	99.4%
53	1258	10	1.0%	31.9%	114	1414	2	0.2%	99.6%
54	1260	14	1.4%	33.4%	115	1426	1	0.1%	99.7%
55	1261	6	0.6%	34.0%	116	1442	1	0.1%	99.8%
56	1263	10	1.0%	35.0%	117	1462	0	0.0%	99.8%
57	1264	12	1.2%	36.2%	118	1494	0	0.0%	99.8%
58	1265	9	0.9%	37.2%	119	1500	0	0.0%	99.8%
59	1267	14	1.4%	38.6%	120	1500	2	0.2%	100.0%
60	1268	11	1.1%	39.7%					

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 8.1.1.12
2013 AIMS A Frequency Distribution Reading Grade 3

Raw Score	Scale Score	FREQ	%	CUML %	Raw Score	Scale Score	FREQ	%	CUML %
0	1000	20	2.1%	2.1%	61	1251	16	1.7%	30.4%
1	1000	1	0.1%	2.2%	62	1253	14	1.5%	31.9%
2	1000	1	0.1%	2.4%	63	1254	14	1.5%	33.4%
3	1036	2	0.2%	2.6%	64	1255	15	1.6%	35.0%
4	1061	2	0.2%	2.8%	65	1256	14	1.5%	36.5%
5	1080	0	0.0%	2.8%	66	1257	15	1.6%	38.1%
6	1095	0	0.0%	2.8%	67	1259	6	0.6%	38.8%
7	1107	0	0.0%	2.8%	68	1260	12	1.3%	40.0%
8	1118	6	0.6%	3.4%	69	1261	8	0.9%	40.9%
9	1126	1	0.1%	3.5%	70	1262	22	2.4%	43.3%
10	1134	0	0.0%	3.5%	71	1264	17	1.8%	45.1%
11	1141	0	0.0%	3.5%	72	1265	24	2.6%	47.6%
12	1147	4	0.4%	4.0%	73	1266	15	1.6%	49.3%
13	1152	2	0.2%	4.2%	74	1267	17	1.8%	51.1%
14	1157	4	0.4%	4.6%	75	1269	16	1.7%	52.8%
15	1162	4	0.4%	5.0%	76	1270	17	1.8%	54.6%
16	1166	5	0.5%	5.6%	77	1271	12	1.3%	55.9%
17	1170	1	0.1%	5.7%	78	1272	13	1.4%	57.3%
18	1173	3	0.3%	6.0%	79	1274	12	1.3%	58.6%
19	1177	0	0.0%	6.0%	80	1275	14	1.5%	60.1%
20	1180	9	1.0%	7.0%	81	1276	9	1.0%	61.0%
21	1183	1	0.1%	7.1%	82	1278	12	1.3%	62.3%
22	1186	5	0.5%	7.6%	83	1279	18	1.9%	64.2%
23	1189	4	0.4%	8.0%	84	1280	14	1.5%	65.7%
24	1191	7	0.7%	8.8%	85	1282	12	1.3%	67.0%
25	1194	3	0.3%	9.1%	86	1283	19	2.0%	69.1%
26	1196	1	0.1%	9.2%	87	1285	16	1.7%	70.8%
27	1199	4	0.4%	9.6%	88	1286	13	1.4%	72.2%
28	1201	6	0.6%	10.3%	89	1288	17	1.8%	74.0%
29	1203	1	0.1%	10.4%	90	1289	15	1.6%	75.6%
30	1205	5	0.5%	10.9%	91	1291	10	1.1%	76.7%
31	1207	3	0.3%	11.2%	92	1292	18	1.9%	78.6%
32	1209	0	0.0%	11.2%	93	1294	13	1.4%	80.0%
33	1211	3	0.3%	11.6%	94	1296	11	1.2%	81.2%
34	1213	3	0.3%	11.9%	95	1297	10	1.1%	82.2%
35	1214	3	0.3%	12.2%	96	1299	9	1.0%	83.2%
36	1216	3	0.3%	12.5%	97	1301	11	1.2%	84.4%
37	1218	8	0.9%	13.4%	98	1303	14	1.5%	85.9%
38	1220	2	0.2%	13.6%	99	1305	14	1.5%	87.4%
39	1221	4	0.4%	14.0%	100	1307	8	0.9%	88.2%
40	1223	5	0.5%	14.6%	101	1309	11	1.2%	89.4%
41	1224	4	0.4%	15.0%	102	1312	8	0.9%	90.3%
42	1226	10	1.1%	16.1%	103	1314	8	0.9%	91.1%
43	1227	3	0.3%	16.4%	104	1316	7	0.7%	91.9%
44	1229	2	0.2%	16.6%	105	1319	10	1.1%	92.9%
45	1230	8	0.9%	17.5%	106	1322	10	1.1%	94.0%
46	1232	5	0.5%	18.0%	107	1325	10	1.1%	95.1%
47	1233	6	0.6%	18.6%	108	1329	7	0.7%	95.8%
48	1234	2	0.2%	18.8%	109	1332	5	0.5%	96.4%
49	1236	9	1.0%	19.8%	110	1336	5	0.5%	96.9%
50	1237	3	0.3%	20.1%	111	1341	5	0.5%	97.4%
51	1239	11	1.2%	21.3%	112	1346	8	0.9%	98.3%
52	1240	9	1.0%	22.3%	113	1352	6	0.6%	98.9%
53	1241	3	0.3%	22.6%	114	1360	0	0.0%	98.9%
54	1242	4	0.4%	23.0%	115	1369	4	0.4%	99.4%
55	1244	11	1.2%	24.2%	116	1380	2	0.2%	99.6%
56	1245	8	0.9%	25.1%	117	1397	1	0.1%	99.7%
57	1246	11	1.2%	26.2%	118	1422	3	0.3%	100.0%
58	1248	7	0.7%	27.0%	119	1473	0	0.0%	100.0%
59	1249	9	1.0%	27.9%	120	1500	0	0.0%	100.0%
60	1250	7	0.7%	28.7%					

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 8.1.1.13
2013 AIMS A Frequency Distribution Reading Grade 4

Raw Score	Scale Score	FREQ	%	CUML %	Raw Score	Scale Score	FREQ	%	CUML %
0	1000	21	2.1%	2.1%	61	1250	7	0.7%	27.5%
1	1000	2	0.2%	2.3%	62	1252	11	1.1%	28.6%
2	1000	0	0.0%	2.3%	63	1253	14	1.4%	30.0%
3	1000	0	0.0%	2.3%	64	1254	8	0.8%	30.8%
4	1029	5	0.5%	2.8%	65	1256	3	0.3%	31.1%
5	1052	1	0.1%	2.9%	66	1257	13	1.3%	32.5%
6	1070	3	0.3%	3.2%	67	1259	11	1.1%	33.6%
7	1085	2	0.2%	3.4%	68	1260	11	1.1%	34.7%
8	1097	3	0.3%	3.7%	69	1261	9	0.9%	35.6%
9	1108	0	0.0%	3.7%	70	1263	15	1.5%	37.1%
10	1117	1	0.1%	3.8%	71	1264	15	1.5%	38.6%
11	1125	2	0.2%	4.0%	72	1265	9	0.9%	39.5%
12	1132	2	0.2%	4.2%	73	1267	6	0.6%	40.1%
13	1139	1	0.1%	4.3%	74	1268	10	1.0%	41.1%
14	1145	2	0.2%	4.5%	75	1270	16	1.6%	42.7%
15	1150	3	0.3%	4.8%	76	1271	18	1.8%	44.6%
16	1155	2	0.2%	5.0%	77	1272	15	1.5%	46.1%
17	1159	2	0.2%	5.2%	78	1274	17	1.7%	47.8%
18	1164	0	0.0%	5.2%	79	1275	9	0.9%	48.7%
19	1167	0	0.0%	5.2%	80	1277	8	0.8%	49.5%
20	1171	3	0.3%	5.5%	81	1278	11	1.1%	50.6%
21	1175	4	0.4%	5.9%	82	1280	14	1.4%	52.0%
22	1178	0	0.0%	5.9%	83	1281	8	0.8%	52.8%
23	1181	3	0.3%	6.3%	84	1283	18	1.8%	54.6%
24	1184	3	0.3%	6.6%	85	1284	19	1.9%	56.6%
25	1187	2	0.2%	6.8%	86	1286	17	1.7%	58.3%
26	1189	5	0.5%	7.3%	87	1288	15	1.5%	59.8%
27	1192	1	0.1%	7.4%	88	1289	19	1.9%	61.7%
28	1195	5	0.5%	7.9%	89	1291	16	1.6%	63.3%
29	1197	3	0.3%	8.2%	90	1293	10	1.0%	64.3%
30	1199	5	0.5%	8.7%	91	1295	18	1.8%	66.1%
31	1201	6	0.6%	9.3%	92	1296	13	1.3%	67.4%
32	1204	3	0.3%	9.6%	93	1298	13	1.3%	68.8%
33	1206	3	0.3%	9.9%	94	1300	12	1.2%	70.0%
34	1208	3	0.3%	10.2%	95	1302	10	1.0%	71.0%
35	1210	6	0.6%	10.8%	96	1304	12	1.2%	72.2%
36	1212	7	0.7%	11.5%	97	1306	17	1.7%	73.9%
37	1214	5	0.5%	12.0%	98	1309	16	1.6%	75.5%
38	1215	1	0.1%	12.1%	99	1311	13	1.3%	76.8%
39	1217	3	0.3%	12.4%	100	1313	23	2.3%	79.1%
40	1219	5	0.5%	12.9%	101	1316	8	0.8%	79.9%
41	1221	6	0.6%	13.5%	102	1318	16	1.6%	81.6%
42	1222	7	0.7%	14.2%	103	1321	13	1.3%	82.9%
43	1224	9	0.9%	15.1%	104	1324	15	1.5%	84.4%
44	1226	5	0.5%	15.6%	105	1327	12	1.2%	85.6%
45	1227	4	0.4%	16.0%	106	1331	20	2.0%	87.6%
46	1229	7	0.7%	16.7%	107	1334	14	1.4%	89.0%
47	1230	3	0.3%	17.0%	108	1338	13	1.3%	90.3%
48	1232	13	1.3%	18.3%	109	1343	9	0.9%	91.2%
49	1233	4	0.4%	18.8%	110	1347	11	1.1%	92.3%
50	1235	7	0.7%	19.5%	111	1353	13	1.3%	93.6%
51	1236	6	0.6%	20.1%	112	1359	15	1.5%	95.2%
52	1238	9	0.9%	21.0%	113	1367	9	0.9%	96.1%
53	1239	7	0.7%	21.7%	114	1375	7	0.7%	96.8%
54	1241	3	0.3%	22.0%	115	1386	5	0.5%	97.3%
55	1242	8	0.8%	22.8%	116	1401	13	1.3%	98.6%
56	1243	4	0.4%	23.2%	117	1421	4	0.4%	99.0%
57	1245	8	0.8%	24.0%	118	1453	4	0.4%	99.4%
58	1246	7	0.7%	24.7%	119	1500	3	0.3%	99.7%
59	1248	13	1.3%	26.0%	120	1500	3	0.3%	100.0%
60	1249	8	0.8%	26.8%					

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 8.1.1.14
2013 AIMS A Frequency Distribution Reading Grade 5

Raw Score	Scale Score	FREQ	%	CUML %	Raw Score	Scale Score	FREQ	%	CUML %
0	1000	25	2.6%	2.6%	61	1241	8	0.8%	22.7%
1	1000	0	0.0%	2.6%	62	1243	11	1.1%	23.8%
2	1000	2	0.2%	2.8%	63	1244	11	1.1%	24.9%
3	1000	0	0.0%	2.8%	64	1246	14	1.5%	26.4%
4	1000	2	0.2%	3.0%	65	1248	7	0.7%	27.1%
5	1003	0	0.0%	3.0%	66	1249	9	0.9%	28.1%
6	1024	0	0.0%	3.0%	67	1251	10	1.0%	29.1%
7	1041	0	0.0%	3.0%	68	1253	9	0.9%	30.1%
8	1055	2	0.2%	3.2%	69	1254	13	1.4%	31.4%
9	1067	2	0.2%	3.4%	70	1256	6	0.6%	32.0%
10	1078	1	0.1%	3.5%	71	1257	11	1.1%	33.2%
11	1087	0	0.0%	3.5%	72	1259	9	0.9%	34.1%
12	1096	2	0.2%	3.8%	73	1261	11	1.1%	35.3%
13	1103	1	0.1%	3.9%	74	1262	17	1.8%	37.1%
14	1110	0	0.0%	3.9%	75	1264	7	0.7%	37.8%
15	1117	3	0.3%	4.2%	76	1266	16	1.7%	39.5%
16	1123	5	0.5%	4.7%	77	1267	6	0.6%	40.1%
17	1128	1	0.1%	4.8%	78	1269	13	1.4%	41.4%
18	1134	1	0.1%	4.9%	79	1271	11	1.1%	42.6%
19	1138	0	0.0%	4.9%	80	1272	12	1.3%	43.8%
20	1143	4	0.4%	5.3%	81	1274	9	0.9%	44.8%
21	1147	2	0.2%	5.5%	82	1276	11	1.1%	45.9%
22	1151	1	0.1%	5.6%	83	1278	7	0.7%	46.7%
23	1155	3	0.3%	5.9%	84	1280	11	1.1%	47.8%
24	1159	2	0.2%	6.2%	85	1281	7	0.7%	48.5%
25	1163	3	0.3%	6.5%	86	1283	10	1.0%	49.6%
26	1166	3	0.3%	6.8%	87	1285	13	1.4%	50.9%
27	1169	4	0.4%	7.2%	88	1287	9	0.9%	51.9%
28	1172	7	0.7%	7.9%	89	1289	10	1.0%	52.9%
29	1175	1	0.1%	8.0%	90	1291	13	1.4%	54.3%
30	1178	1	0.1%	8.1%	91	1293	11	1.1%	55.4%
31	1181	1	0.1%	8.2%	92	1295	14	1.5%	56.9%
32	1184	2	0.2%	8.5%	93	1297	13	1.4%	58.2%
33	1186	2	0.2%	8.7%	94	1300	13	1.4%	59.6%
34	1189	5	0.5%	9.2%	95	1302	14	1.5%	61.1%
35	1191	2	0.2%	9.4%	96	1304	12	1.3%	62.3%
36	1194	4	0.4%	9.8%	97	1307	17	1.8%	64.1%
37	1196	4	0.4%	10.2%	98	1310	19	2.0%	66.1%
38	1199	3	0.3%	10.5%	99	1312	26	2.7%	68.8%
39	1201	1	0.1%	10.6%	100	1315	14	1.5%	70.3%
40	1203	3	0.3%	11.0%	101	1318	16	1.7%	71.9%
41	1205	6	0.6%	11.6%	102	1321	20	2.1%	74.0%
42	1207	6	0.6%	12.2%	103	1324	9	0.9%	74.9%
43	1209	2	0.2%	12.4%	104	1328	11	1.1%	76.1%
44	1211	4	0.4%	12.8%	105	1332	15	1.6%	77.7%
45	1213	2	0.2%	13.0%	106	1335	24	2.5%	80.2%
46	1215	4	0.4%	13.5%	107	1340	9	0.9%	81.1%
47	1217	3	0.3%	13.8%	108	1344	24	2.5%	83.6%
48	1219	4	0.4%	14.2%	109	1350	22	2.3%	85.9%
49	1221	4	0.4%	14.6%	110	1355	14	1.5%	87.4%
50	1222	4	0.4%	15.0%	111	1362	15	1.6%	88.9%
51	1224	5	0.5%	15.6%	112	1369	11	1.1%	90.1%
52	1226	7	0.7%	16.3%	113	1378	13	1.4%	91.4%
53	1228	6	0.6%	16.9%	114	1389	24	2.5%	93.9%
54	1229	5	0.5%	17.4%	115	1402	10	1.0%	95.0%
55	1231	3	0.3%	17.7%	116	1420	17	1.8%	96.8%
56	1233	7	0.7%	18.5%	117	1444	9	0.9%	97.7%
57	1235	6	0.6%	19.1%	118	1484	11	1.1%	98.9%
58	1236	4	0.4%	19.5%	119	1500	6	0.6%	99.5%
59	1238	13	1.4%	20.9%	120	1500	5	0.5%	100.0%
60	1240	9	0.9%	21.8%					

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 8.1.1.15
2013 AIMS A Frequency Distribution Reading Grade 6

Raw Score	Scale Score	FREQ	%	CUML %	Raw Score	Scale Score	FREQ	%	CUML %
0	1000	18	1.9%	1.9%	61	1237	10	1.1%	23.5%
1	1000	1	0.1%	2.0%	62	1238	11	1.2%	24.6%
2	1000	1	0.1%	2.1%	63	1240	8	0.9%	25.5%
3	1000	0	0.0%	2.1%	64	1242	8	0.9%	26.3%
4	1000	1	0.1%	2.2%	65	1243	10	1.1%	27.4%
5	1005	1	0.1%	2.3%	66	1245	12	1.3%	28.7%
6	1025	0	0.0%	2.3%	67	1247	6	0.6%	29.3%
7	1042	1	0.1%	2.5%	68	1249	9	1.0%	30.3%
8	1055	3	0.3%	2.8%	69	1250	4	0.4%	30.7%
9	1067	2	0.2%	3.0%	70	1252	9	1.0%	31.7%
10	1078	0	0.0%	3.0%	71	1254	6	0.6%	32.3%
11	1087	0	0.0%	3.0%	72	1255	7	0.7%	33.0%
12	1095	1	0.1%	3.1%	73	1257	5	0.5%	33.6%
13	1102	0	0.0%	3.1%	74	1259	9	1.0%	34.5%
14	1109	1	0.1%	3.2%	75	1261	12	1.3%	35.8%
15	1115	0	0.0%	3.2%	76	1263	6	0.6%	36.5%
16	1121	4	0.4%	3.6%	77	1264	12	1.3%	37.7%
17	1126	1	0.1%	3.7%	78	1266	7	0.7%	38.5%
18	1131	2	0.2%	3.9%	79	1268	7	0.7%	39.2%
19	1136	2	0.2%	4.2%	80	1270	7	0.7%	40.0%
20	1140	9	1.0%	5.1%	81	1272	12	1.3%	41.3%
21	1144	2	0.2%	5.3%	82	1274	11	1.2%	42.4%
22	1148	3	0.3%	5.7%	83	1276	14	1.5%	43.9%
23	1152	2	0.2%	5.9%	84	1278	18	1.9%	45.8%
24	1155	6	0.6%	6.5%	85	1280	19	2.0%	47.9%
25	1159	0	0.0%	6.5%	86	1282	12	1.3%	49.1%
26	1162	3	0.3%	6.8%	87	1284	8	0.9%	50.0%
27	1165	1	0.1%	6.9%	88	1286	13	1.4%	51.4%
28	1168	3	0.3%	7.2%	89	1288	8	0.9%	52.2%
29	1171	1	0.1%	7.4%	90	1291	12	1.3%	53.5%
30	1174	2	0.2%	7.6%	91	1293	11	1.2%	54.7%
31	1176	3	0.3%	7.9%	92	1295	7	0.7%	55.4%
32	1179	7	0.7%	8.6%	93	1298	10	1.1%	56.5%
33	1182	2	0.2%	8.8%	94	1300	13	1.4%	57.9%
34	1184	3	0.3%	9.2%	95	1303	13	1.4%	59.3%
35	1187	2	0.2%	9.4%	96	1306	9	1.0%	60.2%
36	1189	3	0.3%	9.7%	97	1308	14	1.5%	61.7%
37	1191	5	0.5%	10.2%	98	1311	14	1.5%	63.2%
38	1193	4	0.4%	10.7%	99	1314	18	1.9%	65.1%
39	1196	3	0.3%	11.0%	100	1317	20	2.1%	67.3%
40	1198	3	0.3%	11.3%	101	1321	17	1.8%	69.1%
41	1200	3	0.3%	11.6%	102	1324	12	1.3%	70.4%
42	1202	5	0.5%	12.2%	103	1328	14	1.5%	71.9%
43	1204	1	0.1%	12.3%	104	1332	17	1.8%	73.7%
44	1206	3	0.3%	12.6%	105	1336	22	2.3%	76.0%
45	1208	4	0.4%	13.0%	106	1340	26	2.8%	78.8%
46	1210	2	0.2%	13.2%	107	1345	17	1.8%	80.6%
47	1212	6	0.6%	13.9%	108	1350	20	2.1%	82.7%
48	1214	6	0.6%	14.5%	109	1355	22	2.3%	85.1%
49	1215	5	0.5%	15.0%	110	1362	16	1.7%	86.8%
50	1217	5	0.5%	15.6%	111	1369	13	1.4%	88.2%
51	1219	6	0.6%	16.2%	112	1377	16	1.7%	89.9%
52	1221	7	0.7%	17.0%	113	1386	15	1.6%	91.5%
53	1223	6	0.6%	17.6%	114	1397	20	2.1%	93.6%
54	1224	8	0.9%	18.4%	115	1411	18	1.9%	95.5%
55	1226	8	0.9%	19.3%	116	1429	15	1.6%	97.1%
56	1228	3	0.3%	19.6%	117	1454	7	0.7%	97.9%
57	1230	7	0.7%	20.4%	118	1495	6	0.6%	98.5%
58	1231	4	0.4%	20.8%	119	1500	12	1.3%	99.8%
59	1233	10	1.1%	21.9%	120	1500	2	0.2%	100.0%
60	1235	18	1.9%	1.9%					

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 8.1.1.16
2013 AIMS A Frequency Distribution Reading Grade 7

Raw Score	Scale Score	FREQ	%	CUML %	Raw Score	Scale Score	FREQ	%	CUML %
0	1000	19	1.9%	1.9%	61	1235	3	0.3%	20.3%
1	1000	0	0.0%	1.9%	62	1237	8	0.8%	21.1%
2	1000	0	0.0%	1.9%	63	1238	10	1.0%	22.1%
3	1000	0	0.0%	1.9%	64	1240	6	0.6%	22.7%
4	1002	1	0.1%	2.0%	65	1242	3	0.3%	23.0%
5	1025	1	0.1%	2.1%	66	1244	6	0.6%	23.6%
6	1043	1	0.1%	2.2%	67	1245	6	0.6%	24.1%
7	1058	1	0.1%	2.2%	68	1247	4	0.4%	24.5%
8	1070	2	0.2%	2.4%	69	1249	9	0.9%	25.4%
9	1080	0	0.0%	2.4%	70	1250	10	1.0%	26.4%
10	1089	0	0.0%	2.4%	71	1252	6	0.6%	27.0%
11	1097	1	0.1%	2.5%	72	1254	2	0.2%	27.2%
12	1104	4	0.4%	2.9%	73	1256	10	1.0%	28.2%
13	1111	3	0.3%	3.2%	74	1257	12	1.2%	29.3%
14	1117	1	0.1%	3.3%	75	1259	9	0.9%	30.2%
15	1122	2	0.2%	3.5%	76	1261	5	0.5%	30.7%
16	1127	10	1.0%	4.5%	77	1263	7	0.7%	31.4%
17	1132	0	0.0%	4.5%	78	1265	13	1.3%	32.6%
18	1136	1	0.1%	4.6%	79	1267	4	0.4%	33.0%
19	1140	0	0.0%	4.6%	80	1268	4	0.4%	33.4%
20	1144	5	0.5%	5.1%	81	1270	6	0.6%	34.0%
21	1148	1	0.1%	5.2%	82	1272	11	1.1%	35.1%
22	1151	0	0.0%	5.2%	83	1274	8	0.8%	35.9%
23	1155	1	0.1%	5.3%	84	1276	13	1.3%	37.1%
24	1158	1	0.1%	5.4%	85	1278	8	0.8%	37.9%
25	1161	1	0.1%	5.5%	86	1280	10	1.0%	38.9%
26	1164	4	0.4%	5.9%	87	1282	6	0.6%	39.5%
27	1167	2	0.2%	6.1%	88	1285	8	0.8%	40.3%
28	1170	5	0.5%	6.5%	89	1287	9	0.9%	41.2%
29	1172	1	0.1%	6.6%	90	1289	19	1.9%	43.0%
30	1175	5	0.5%	7.1%	91	1291	13	1.3%	44.3%
31	1177	2	0.2%	7.3%	92	1294	7	0.7%	45.0%
32	1180	2	0.2%	7.5%	93	1296	12	1.2%	46.1%
33	1182	3	0.3%	7.8%	94	1299	12	1.2%	47.3%
34	1184	3	0.3%	8.1%	95	1301	15	1.5%	48.8%
35	1187	3	0.3%	8.4%	96	1304	12	1.2%	50.0%
36	1189	2	0.2%	8.6%	97	1306	15	1.5%	51.4%
37	1191	4	0.4%	9.0%	98	1309	22	2.2%	53.6%
38	1193	4	0.4%	9.4%	99	1312	17	1.7%	55.2%
39	1195	6	0.6%	10.0%	100	1315	15	1.5%	56.7%
40	1197	6	0.6%	10.6%	101	1318	15	1.5%	58.2%
41	1199	2	0.2%	10.8%	102	1322	22	2.2%	60.3%
42	1201	5	0.5%	11.2%	103	1325	23	2.2%	62.6%
43	1203	5	0.5%	11.7%	104	1329	21	2.1%	64.6%
44	1205	4	0.4%	12.1%	105	1333	31	3.0%	67.6%
45	1207	7	0.7%	12.8%	106	1337	32	3.1%	70.8%
46	1209	3	0.3%	13.1%	107	1341	15	1.5%	72.2%
47	1211	9	0.9%	14.0%	108	1346	25	2.4%	74.7%
48	1212	4	0.4%	14.4%	109	1351	18	1.8%	76.4%
49	1214	4	0.4%	14.8%	110	1356	22	2.2%	78.6%
50	1216	4	0.4%	15.2%	111	1363	35	3.4%	82.0%
51	1218	3	0.3%	15.4%	112	1369	30	2.9%	84.9%
52	1220	1	0.1%	15.5%	113	1377	21	2.1%	87.0%
53	1221	6	0.6%	16.1%	114	1387	31	3.0%	90.0%
54	1223	9	0.9%	17.0%	115	1398	32	3.1%	93.2%
55	1225	3	0.3%	17.3%	116	1413	22	2.2%	95.3%
56	1227	2	0.2%	17.5%	117	1434	9	0.9%	96.2%
57	1228	6	0.6%	18.1%	118	1467	9	0.9%	97.1%
58	1230	7	0.7%	18.8%	119	1500	12	1.2%	98.2%
59	1232	4	0.4%	19.2%	120	1500	18	1.8%	100.0%
60	1233	9	0.9%	20.0%					

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 8.1.1.17
2013 AIMS A Frequency Distribution Reading Grade 8

Raw Score	Scale Score	FREQ	%	CUML %	Raw Score	Scale Score	FREQ	%	CUML %
0	1000	22	2.3%	2.3%	61	1246	8	0.8%	20.5%
1	1000	0	0.0%	2.3%	62	1248	4	0.4%	20.9%
2	1005	0	0.0%	2.3%	63	1249	4	0.4%	21.3%
3	1041	0	0.0%	2.3%	64	1250	8	0.8%	22.1%
4	1066	4	0.4%	2.7%	65	1252	9	0.9%	23.1%
5	1083	0	0.0%	2.7%	66	1253	9	0.9%	24.0%
6	1097	0	0.0%	2.7%	67	1254	5	0.5%	24.5%
7	1108	1	0.1%	2.8%	68	1256	3	0.3%	24.8%
8	1118	2	0.2%	3.0%	69	1257	11	1.1%	25.9%
9	1126	0	0.0%	3.0%	70	1258	8	0.8%	26.7%
10	1132	3	0.3%	3.3%	71	1260	8	0.8%	27.6%
11	1139	2	0.2%	3.5%	72	1261	7	0.7%	28.3%
12	1144	2	0.2%	3.7%	73	1262	9	0.9%	29.2%
13	1149	0	0.0%	3.7%	74	1264	5	0.5%	29.7%
14	1153	0	0.0%	3.7%	75	1265	9	0.9%	30.6%
15	1157	2	0.2%	3.9%	76	1266	12	1.2%	31.9%
16	1161	3	0.3%	4.2%	77	1268	8	0.8%	32.7%
17	1165	1	0.1%	4.3%	78	1269	13	1.3%	34.0%
18	1168	1	0.1%	4.4%	79	1270	13	1.3%	35.3%
19	1171	1	0.1%	4.5%	80	1272	9	0.9%	36.3%
20	1174	2	0.2%	4.7%	81	1273	15	1.5%	37.8%
21	1177	0	0.0%	4.7%	82	1274	14	1.4%	39.2%
22	1180	1	0.1%	4.8%	83	1276	15	1.5%	40.8%
23	1182	5	0.5%	5.3%	84	1277	8	0.8%	41.6%
24	1185	2	0.2%	5.5%	85	1279	10	1.0%	42.6%
25	1187	2	0.2%	5.7%	86	1280	12	1.2%	43.9%
26	1190	0	0.0%	5.7%	87	1282	11	1.1%	45.0%
27	1192	4	0.4%	6.1%	88	1283	11	1.1%	46.1%
28	1194	2	0.2%	6.4%	89	1285	13	1.3%	47.4%
29	1196	4	0.4%	6.8%	90	1286	12	1.2%	48.7%
30	1198	3	0.3%	7.1%	91	1288	13	1.3%	50.0%
31	1200	3	0.3%	7.4%	92	1289	10	1.0%	51.0%
32	1202	7	0.7%	8.1%	93	1291	8	0.8%	51.8%
33	1204	1	0.1%	8.2%	94	1293	7	0.7%	52.6%
34	1206	2	0.2%	8.4%	95	1295	15	1.5%	54.1%
35	1208	5	0.5%	8.9%	96	1296	16	1.6%	55.7%
36	1209	2	0.2%	9.1%	97	1298	18	1.8%	57.6%
37	1211	3	0.3%	9.4%	98	1300	12	1.2%	58.8%
38	1213	2	0.2%	9.6%	99	1302	17	1.7%	60.6%
39	1214	4	0.4%	10.0%	100	1304	16	1.6%	62.2%
40	1216	5	0.5%	10.6%	101	1307	12	1.2%	63.4%
41	1218	2	0.2%	10.8%	102	1309	11	1.1%	64.5%
42	1219	7	0.7%	11.5%	103	1311	16	1.6%	66.2%
43	1221	1	0.1%	11.6%	104	1314	15	1.5%	67.7%
44	1222	2	0.2%	11.8%	105	1317	18	1.8%	69.6%
45	1224	5	0.5%	12.3%	106	1319	16	1.6%	71.2%
46	1225	2	0.2%	12.5%	107	1323	17	1.7%	73.0%
47	1227	2	0.2%	12.7%	108	1326	17	1.7%	74.7%
48	1228	3	0.3%	13.0%	109	1330	12	1.2%	75.9%
49	1230	7	0.7%	13.7%	110	1334	22	2.3%	78.2%
50	1231	4	0.4%	14.1%	111	1338	17	1.7%	79.9%
51	1233	7	0.7%	14.9%	112	1344	18	1.8%	81.8%
52	1234	7	0.7%	15.6%	113	1350	17	1.7%	83.5%
53	1236	5	0.5%	16.1%	114	1357	29	3.0%	86.5%
54	1237	4	0.4%	16.5%	115	1366	20	2.0%	88.5%
55	1238	5	0.5%	17.0%	116	1378	31	3.2%	91.7%
56	1240	4	0.4%	17.4%	117	1395	14	1.4%	93.1%
57	1241	3	0.3%	17.7%	118	1422	20	2.0%	95.2%
58	1242	5	0.5%	18.2%	119	1478	29	3.0%	98.2%
59	1244	4	0.4%	18.6%	120	1500	18	1.8%	100.0%
60	1245	10	1.0%	19.7%					

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 8.1.1.18
2013 AIMS A Frequency Distribution Reading High School

Raw Score	Scale Score	FREQ	%	CUML %	Raw Score	Scale Score	FREQ	%	CUML %
0	1000	29	3.0%	3.0%	61	1249	9	0.9%	22.2%
1	1000	0	0.0%	3.0%	62	1250	4	0.4%	22.6%
2	1005	0	0.0%	3.0%	63	1251	7	0.7%	23.3%
3	1044	0	0.0%	3.0%	64	1253	6	0.6%	24.0%
4	1070	4	0.4%	3.4%	65	1254	6	0.6%	24.6%
5	1089	1	0.1%	3.5%	66	1255	8	0.8%	25.4%
6	1104	1	0.1%	3.6%	67	1256	7	0.7%	26.1%
7	1116	1	0.1%	3.7%	68	1258	4	0.4%	26.5%
8	1126	5	0.5%	4.2%	69	1259	3	0.3%	26.8%
9	1134	1	0.1%	4.3%	70	1260	7	0.7%	27.5%
10	1141	1	0.1%	4.4%	71	1261	7	0.7%	28.2%
11	1147	0	0.0%	4.4%	72	1263	1	0.1%	28.4%
12	1153	2	0.2%	4.6%	73	1264	14	1.4%	29.8%
13	1158	1	0.1%	4.7%	74	1265	7	0.7%	30.5%
14	1162	4	0.4%	5.1%	75	1266	5	0.5%	31.0%
15	1167	0	0.0%	5.1%	76	1268	11	1.1%	32.1%
16	1170	4	0.4%	5.5%	77	1269	10	1.0%	33.2%
17	1174	0	0.0%	5.5%	78	1270	9	0.9%	34.1%
18	1177	0	0.0%	5.5%	79	1272	6	0.6%	34.7%
19	1180	0	0.0%	5.5%	80	1273	9	0.9%	35.6%
20	1183	5	0.5%	6.0%	81	1274	3	0.3%	35.9%
21	1186	1	0.1%	6.1%	82	1276	8	0.8%	36.7%
22	1188	1	0.1%	6.2%	83	1277	10	1.0%	37.8%
23	1191	4	0.4%	6.7%	84	1278	7	0.7%	38.5%
24	1193	5	0.5%	7.2%	85	1280	6	0.6%	39.1%
25	1195	2	0.2%	7.4%	86	1281	7	0.7%	39.8%
26	1197	1	0.1%	7.5%	87	1283	7	0.7%	40.5%
27	1200	4	0.4%	7.9%	88	1284	6	0.6%	41.1%
28	1202	5	0.5%	8.4%	89	1286	10	1.0%	42.2%
29	1203	2	0.2%	8.6%	90	1287	9	0.9%	43.1%
30	1205	1	0.1%	8.7%	91	1289	5	0.5%	43.6%
31	1207	2	0.2%	8.9%	92	1291	11	1.1%	44.7%
32	1209	3	0.3%	9.2%	93	1292	7	0.7%	45.4%
33	1211	1	0.1%	9.3%	94	1294	10	1.0%	46.5%
34	1212	2	0.2%	9.5%	95	1296	9	0.9%	47.4%
35	1214	3	0.3%	9.8%	96	1298	13	1.3%	48.7%
36	1216	4	0.4%	10.2%	97	1300	11	1.1%	49.8%
37	1217	1	0.1%	10.3%	98	1302	14	1.4%	51.3%
38	1219	4	0.4%	10.7%	99	1304	13	1.3%	52.6%
39	1220	4	0.4%	11.2%	100	1306	13	1.3%	53.9%
40	1222	5	0.5%	11.7%	101	1309	9	0.9%	54.9%
41	1223	4	0.4%	12.1%	102	1311	14	1.4%	56.3%
42	1225	3	0.3%	12.4%	103	1314	12	1.2%	57.5%
43	1226	3	0.3%	12.7%	104	1316	14	1.4%	59.0%
44	1227	6	0.6%	13.3%	105	1319	17	1.7%	60.7%
45	1229	6	0.6%	13.9%	106	1322	19	1.9%	62.6%
46	1230	4	0.4%	14.3%	107	1325	25	2.6%	65.2%
47	1231	7	0.7%	15.0%	108	1329	28	2.9%	68.1%
48	1233	3	0.3%	15.4%	109	1333	15	1.5%	69.6%
49	1234	3	0.3%	15.7%	110	1337	17	1.7%	71.3%
50	1235	3	0.3%	16.0%	111	1342	18	1.8%	73.2%
51	1237	5	0.5%	16.5%	112	1348	26	2.7%	75.8%
52	1238	5	0.5%	17.0%	113	1354	16	1.6%	77.5%
53	1239	3	0.3%	17.3%	114	1362	29	3.0%	80.5%
54	1240	3	0.3%	17.6%	115	1372	20	2.0%	82.5%
55	1242	5	0.5%	18.1%	116	1384	37	3.8%	86.3%
56	1243	6	0.6%	18.7%	117	1401	27	2.8%	89.0%
57	1244	5	0.5%	19.2%	118	1428	29	3.0%	92.0%
58	1245	5	0.5%	19.8%	119	1481	42	4.3%	96.3%
59	1247	6	0.6%	20.4%	120	1500	36	3.7%	100.0%
60	1248	9	0.9%	21.3%					

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 8.1.1.19
2013 AIMS A Frequency Distribution Science Grade 4

Raw Score	Scale Score	FREQ	%	CUML %	Raw Score	Scale Score	FREQ	%	CUML %
0	1000	25	2.5%	2.5%	61	1248	6	0.6%	24.7%
1	1000	1	0.1%	2.6%	62	1249	8	0.8%	25.5%
2	1000	0	0.0%	2.6%	63	1250	11	1.1%	26.6%
3	1015	2	0.2%	2.8%	64	1252	9	0.9%	27.5%
4	1044	2	0.2%	3.0%	65	1253	8	0.8%	28.3%
5	1066	0	0.0%	3.0%	66	1254	9	0.9%	29.2%
6	1083	0	0.0%	3.0%	67	1255	7	0.7%	29.9%
7	1097	0	0.0%	3.0%	68	1256	9	0.9%	30.8%
8	1109	1	0.1%	3.1%	69	1258	9	0.9%	31.8%
9	1120	0	0.0%	3.1%	70	1259	9	0.9%	32.7%
10	1128	1	0.1%	3.2%	71	1260	6	0.6%	33.3%
11	1136	0	0.0%	3.2%	72	1261	5	0.5%	33.8%
12	1143	1	0.1%	3.3%	73	1263	9	0.9%	34.7%
13	1149	1	0.1%	3.4%	74	1264	7	0.7%	35.4%
14	1154	2	0.2%	3.6%	75	1265	11	1.1%	36.5%
15	1159	3	0.3%	3.9%	76	1266	15	1.5%	38.0%
16	1164	1	0.1%	4.0%	77	1268	12	1.2%	39.2%
17	1168	2	0.2%	4.2%	78	1269	10	1.0%	40.2%
18	1172	6	0.6%	4.8%	79	1270	8	0.8%	41.0%
19	1175	5	0.5%	5.3%	80	1272	6	0.6%	41.6%
20	1178	5	0.5%	5.8%	81	1273	13	1.3%	42.9%
21	1182	0	0.0%	5.8%	82	1274	8	0.8%	43.8%
22	1185	2	0.2%	6.0%	83	1276	16	1.6%	45.4%
23	1187	2	0.2%	6.3%	84	1277	11	1.1%	46.5%
24	1190	5	0.5%	6.8%	85	1279	13	1.3%	47.8%
25	1192	0	0.0%	6.8%	86	1280	9	0.9%	48.7%
26	1195	1	0.1%	6.9%	87	1282	13	1.3%	50.0%
27	1197	4	0.4%	7.3%	88	1283	5	0.5%	50.5%
28	1199	5	0.5%	7.8%	89	1285	14	1.4%	51.9%
29	1201	3	0.3%	8.1%	90	1286	15	1.5%	53.4%
30	1203	4	0.4%	8.5%	91	1288	9	0.9%	54.3%
31	1205	1	0.1%	8.6%	92	1290	13	1.3%	55.6%
32	1207	4	0.4%	9.0%	93	1291	22	2.2%	57.9%
33	1209	3	0.3%	9.3%	94	1293	11	1.1%	59.0%
34	1211	2	0.2%	9.5%	95	1295	8	0.8%	59.8%
35	1212	4	0.4%	9.9%	96	1297	9	0.9%	60.7%
36	1214	3	0.3%	10.2%	97	1299	12	1.2%	61.9%
37	1216	2	0.2%	10.4%	98	1301	13	1.3%	63.2%
38	1217	6	0.6%	11.0%	99	1303	16	1.6%	64.8%
39	1219	6	0.6%	11.6%	100	1305	10	1.0%	65.8%
40	1220	6	0.6%	12.2%	101	1308	9	0.9%	66.7%
41	1222	6	0.6%	12.8%	102	1310	20	2.0%	68.8%
42	1223	4	0.4%	13.2%	103	1313	11	1.1%	69.9%
43	1225	7	0.7%	13.9%	104	1316	20	2.0%	71.9%
44	1226	4	0.4%	14.3%	105	1319	20	2.0%	73.9%
45	1228	4	0.4%	14.7%	106	1322	19	1.9%	75.8%
46	1229	3	0.3%	15.0%	107	1326	23	2.3%	78.1%
47	1230	8	0.8%	15.8%	108	1330	17	1.7%	79.8%
48	1232	7	0.7%	16.5%	109	1334	17	1.7%	81.6%
49	1233	9	0.9%	17.4%	110	1339	20	2.0%	83.6%
50	1234	7	0.7%	18.1%	111	1344	29	2.9%	86.5%
51	1236	2	0.2%	18.3%	112	1350	21	2.1%	88.6%
52	1237	3	0.3%	18.6%	113	1358	16	1.6%	90.2%
53	1238	6	0.6%	19.3%	114	1366	16	1.6%	91.8%
54	1239	2	0.2%	19.5%	115	1377	29	2.9%	94.8%
55	1241	8	0.8%	20.3%	116	1392	20	2.0%	96.8%
56	1242	8	0.8%	21.1%	117	1411	7	0.7%	97.5%
57	1243	9	0.9%	22.0%	118	1442	12	1.2%	98.7%
58	1244	9	0.9%	22.9%	119	1500	7	0.7%	99.4%
59	1246	2	0.2%	23.1%	120	1500	6	0.6%	100.0%
60	1247	10	1.0%	24.1%					

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 8.1.1.20
2013 AIMS A Frequency Distribution Science Grade 8

Raw Score	Scale Score	FREQ	%	CUML %	Raw Score	Scale Score	FREQ	%	CUML %
0	1000	22	2.3%	2.3%	61	1253	8	0.8%	24.0%
1	1000	1	0.1%	2.4%	62	1254	5	0.5%	24.5%
2	1023	0	0.0%	2.4%	63	1255	4	0.4%	24.9%
3	1056	0	0.0%	2.4%	64	1256	4	0.4%	25.3%
4	1078	2	0.2%	2.6%	65	1257	10	1.0%	26.3%
5	1095	2	0.2%	2.8%	66	1258	7	0.7%	27.0%
6	1108	0	0.0%	2.8%	67	1259	12	1.2%	28.3%
7	1119	1	0.1%	2.9%	68	1260	10	1.0%	29.3%
8	1129	3	0.3%	3.2%	69	1262	6	0.6%	29.9%
9	1137	0	0.0%	3.2%	70	1263	10	1.0%	30.9%
10	1144	0	0.0%	3.2%	71	1264	11	1.1%	32.1%
11	1150	2	0.2%	3.4%	72	1265	12	1.2%	33.3%
12	1155	1	0.1%	3.5%	73	1266	4	0.4%	33.7%
13	1160	1	0.1%	3.6%	74	1267	4	0.4%	34.1%
14	1165	3	0.3%	3.9%	75	1268	3	0.3%	34.4%
15	1169	1	0.1%	4.0%	76	1269	12	1.2%	35.7%
16	1173	5	0.5%	4.5%	77	1270	10	1.0%	36.7%
17	1177	1	0.1%	4.6%	78	1272	9	0.9%	37.6%
18	1180	0	0.0%	4.6%	79	1273	10	1.0%	38.6%
19	1184	0	0.0%	4.6%	80	1274	8	0.8%	39.4%
20	1187	2	0.2%	4.8%	81	1275	9	0.9%	40.4%
21	1189	0	0.0%	4.8%	82	1276	9	0.9%	41.3%
22	1192	1	0.1%	4.9%	83	1277	12	1.2%	42.5%
23	1195	1	0.1%	5.0%	84	1279	10	1.0%	43.5%
24	1197	3	0.3%	5.3%	85	1280	8	0.8%	44.4%
25	1200	4	0.4%	5.7%	86	1281	9	0.9%	45.3%
26	1202	3	0.3%	6.0%	87	1282	19	1.9%	47.2%
27	1204	5	0.5%	6.6%	88	1284	11	1.1%	48.4%
28	1206	5	0.5%	7.1%	89	1285	9	0.9%	49.3%
29	1208	2	0.2%	7.3%	90	1286	10	1.0%	50.3%
30	1210	1	0.1%	7.4%	91	1288	13	1.3%	51.6%
31	1212	2	0.2%	7.6%	92	1289	21	2.2%	53.8%
32	1214	1	0.1%	7.7%	93	1290	13	1.3%	55.1%
33	1216	3	0.3%	8.0%	94	1292	12	1.2%	56.4%
34	1217	0	0.0%	8.0%	95	1293	11	1.1%	57.5%
35	1219	5	0.5%	8.5%	96	1295	13	1.3%	58.8%
36	1221	2	0.2%	8.7%	97	1297	15	1.5%	60.3%
37	1222	1	0.1%	8.8%	98	1298	18	1.8%	62.2%
38	1224	4	0.4%	9.2%	99	1300	15	1.5%	63.7%
39	1225	6	0.6%	9.8%	100	1302	22	2.3%	66.0%
40	1227	6	0.6%	10.5%	101	1304	15	1.5%	67.5%
41	1228	3	0.3%	10.8%	102	1305	19	1.9%	69.5%
42	1229	4	0.4%	11.2%	103	1308	21	2.2%	71.6%
43	1231	5	0.5%	11.7%	104	1310	23	2.4%	74.0%
44	1232	8	0.8%	12.5%	105	1312	14	1.4%	75.4%
45	1234	12	1.2%	13.7%	106	1314	20	2.0%	77.5%
46	1235	5	0.5%	14.2%	107	1317	18	1.8%	79.3%
47	1236	4	0.4%	14.7%	108	1320	18	1.8%	81.1%
48	1237	4	0.4%	15.1%	109	1323	17	1.7%	82.9%
49	1239	5	0.5%	15.6%	110	1327	14	1.4%	84.3%
50	1240	8	0.8%	16.4%	111	1330	22	2.3%	86.6%
51	1241	3	0.3%	16.7%	112	1335	15	1.5%	88.1%
52	1242	7	0.7%	17.4%	113	1340	23	2.4%	90.5%
53	1244	6	0.6%	18.0%	114	1346	17	1.7%	92.2%
54	1245	8	0.8%	18.9%	115	1353	20	2.0%	94.3%
55	1246	9	0.9%	19.8%	116	1363	14	1.4%	95.7%
56	1247	5	0.5%	20.3%	117	1377	8	0.8%	96.5%
57	1248	5	0.5%	20.8%	118	1399	10	1.0%	97.5%
58	1249	7	0.7%	21.5%	119	1442	10	1.0%	98.6%
59	1250	9	0.9%	22.4%	120	1500	14	1.4%	100.0%
60	1252	7	0.7%	23.2%					

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Table 8.1.1.21
2013 AIMS A Frequency Distribution Science Grade 10

Raw Score	Scale Score	FREQ	%	CUML %	Raw Score	Scale Score	FREQ	%	CUML %
0	1000	25	2.9%	2.9%	61	1246	2	0.2%	25.6%
1	1007	1	0.1%	3.0%	62	1247	6	0.7%	26.3%
2	1058	0	0.0%	3.0%	63	1248	1	0.1%	26.4%
3	1087	1	0.1%	3.1%	64	1249	3	0.3%	26.8%
4	1107	5	0.6%	3.7%	65	1250	5	0.6%	27.4%
5	1122	1	0.1%	3.8%	66	1251	4	0.5%	27.8%
6	1133	1	0.1%	4.0%	67	1252	4	0.5%	28.3%
7	1142	2	0.2%	4.2%	68	1252	5	0.6%	28.9%
8	1149	2	0.2%	4.4%	69	1253	7	0.8%	29.7%
9	1156	1	0.1%	4.5%	70	1254	6	0.7%	30.4%
10	1161	0	0.0%	4.5%	71	1255	1	0.1%	30.5%
11	1166	0	0.0%	4.5%	72	1256	9	1.0%	31.5%
12	1170	8	0.9%	5.5%	73	1257	7	0.8%	32.4%
13	1174	1	0.1%	5.6%	74	1258	8	0.9%	33.3%
14	1178	1	0.1%	5.7%	75	1259	8	0.9%	34.2%
15	1181	0	0.0%	5.7%	76	1260	12	1.4%	35.6%
16	1184	5	0.6%	6.3%	77	1261	7	0.8%	36.4%
17	1187	1	0.1%	6.4%	78	1262	7	0.8%	37.3%
18	1189	0	0.0%	6.4%	79	1263	11	1.3%	38.5%
19	1192	2	0.2%	6.6%	80	1264	14	1.6%	40.2%
20	1194	4	0.5%	7.1%	81	1265	8	0.9%	41.1%
21	1196	1	0.1%	7.2%	82	1266	8	0.9%	42.0%
22	1198	3	0.3%	7.6%	83	1267	2	0.2%	42.3%
23	1200	1	0.1%	7.7%	84	1269	10	1.2%	43.4%
24	1202	3	0.3%	8.0%	85	1270	11	1.3%	44.7%
25	1204	1	0.1%	8.1%	86	1271	6	0.7%	45.4%
26	1206	2	0.2%	8.4%	87	1272	11	1.3%	46.7%
27	1207	0	0.0%	8.4%	88	1273	10	1.2%	47.8%
28	1209	5	0.6%	9.0%	89	1274	5	0.6%	48.4%
29	1210	2	0.2%	9.2%	90	1275	10	1.2%	49.6%
30	1212	2	0.2%	9.4%	91	1277	6	0.7%	50.3%
31	1213	4	0.5%	9.9%	92	1278	7	0.8%	51.1%
32	1215	3	0.3%	10.2%	93	1279	14	1.6%	52.7%
33	1216	5	0.6%	10.8%	94	1281	13	1.5%	54.2%
34	1217	5	0.6%	11.4%	95	1282	16	1.9%	56.1%
35	1219	2	0.2%	11.6%	96	1283	9	1.0%	57.2%
36	1220	4	0.5%	12.1%	97	1285	11	1.3%	58.4%
37	1221	8	0.9%	13.0%	98	1286	16	1.9%	60.3%
38	1222	1	0.1%	13.2%	99	1288	18	2.1%	62.4%
39	1223	3	0.3%	13.5%	100	1289	13	1.5%	63.9%
40	1225	4	0.5%	14.0%	101	1291	15	1.7%	65.7%
41	1226	4	0.5%	14.4%	102	1293	13	1.5%	67.2%
42	1227	3	0.3%	14.8%	103	1295	16	1.9%	69.0%
43	1228	3	0.3%	15.1%	104	1297	13	1.5%	70.5%
44	1229	5	0.6%	15.7%	105	1299	16	1.9%	72.4%
45	1230	4	0.5%	16.2%	106	1301	17	2.0%	74.4%
46	1231	4	0.5%	16.6%	107	1304	21	2.4%	76.8%
47	1232	5	0.6%	17.2%	108	1306	16	1.9%	78.7%
48	1233	5	0.6%	17.8%	109	1309	21	2.4%	81.1%
49	1234	6	0.7%	18.5%	110	1312	20	2.3%	83.5%
50	1235	5	0.6%	19.1%	111	1316	21	2.4%	85.9%
51	1236	4	0.5%	19.6%	112	1320	17	2.0%	87.9%
52	1237	5	0.6%	20.1%	113	1325	16	1.9%	89.8%
53	1238	10	1.2%	21.3%	114	1330	22	2.6%	92.3%
54	1239	1	0.1%	21.4%	115	1337	11	1.3%	93.6%
55	1240	5	0.6%	22.0%	116	1346	16	1.9%	95.5%
56	1241	5	0.6%	22.6%	117	1358	10	1.2%	96.6%
57	1242	8	0.9%	23.5%	118	1378	11	1.3%	97.9%
58	1243	7	0.8%	24.3%	119	1419	11	1.3%	99.2%
59	1244	4	0.5%	24.8%	120	1500	7	0.8%	100.0%
60	1245	5	0.6%	25.4%					

Note: Blue = Exceeds, Green = Meets, Yellow = Approaches, and Orange = Falls Far Below the Standard

Part 9: Reliability and Validity Evidence

Part 9 of the Technical Report provides evidence supporting the reliability and validity of the 2013 AIMS A assessments. All data presented in this section were computed using population test data available in the final electronic data files. The following AERA/APA/NCME standards are addressed: 1.5, 1.7, 2.1, 2.4, 2.10, 2.13, 3.16, 4.15, 6.5, 7.1, 7.3, and 7.10.

9.1 Reliability

AERA/APA/NCME standards for Educational and Psychological Testing refer to reliability as the "consistency of [a measure] when the testing procedure is repeated on a population of individuals or groups." A reliable test produces stable scores; that is, very similar score distributions would result if the test were administered repeatedly under similar conditions to the same students without memory or fatigue affecting the scores. Reliability of the 2013 AIMS A assessments was estimated by internal consistency for all tests. It should be noted that due to the large number of non-responders in the sample and the low number of performance task test items the accuracy of the reliability coefficient may be problematic.

9.1.1 Measures of Internal Consistency

For tests consisting of constructed response and/or multiple choice items, Cronbach's alpha is a frequently used measure of internal consistency. Cronbach's alpha is computed as (Crocker & Algina, 1986)

$$\hat{\alpha} = \frac{k}{k-1}\left(1 - \frac{\sum \sigma_i^2}{\sigma_X^2}\right),$$

where k = number of items, σ_X^2 = the total score variance, and σ_i^2 = the variance of item i.

Reliability estimates for the tests administered as part of the 2013 AIMS A assessments are presented in Table 9.1.1. Note that a high degree of internal consistency is evident for all tests.

Table 9.1.1
2013 AIMS A Internal Consistency

	Mathematics			Reading			Science		
		Alpha			Alpha			Alpha	
Grade	N	MC	PT	N	MC	PT	N	MC	PT
3	934	0.77	0.94	934	0.76	0.94			
4	992	0.83	0.94	992	0.78	0.95	992	0.86	0.95
5	958	0.75	0.94	958	0.84	0.96			
6	938	0.78	0.94	938	0.84	0.96			
7	1,023	0.79	0.95	1,023	0.85	0.96			
8	976	0.75	0.94	976	0.86	0.96	976	0.85	0.96
HS	977	0.74	0.94	977	0.88	0.97	859	0.86	0.97

9.2 Validity

"Validity refers to the degree to which evidence and theory support the interpretations of test scores entailed by proposed users of tests. Validity is, therefore, the most fundamental consideration in developing and evaluating tests" (AERA/APA/NCME, 1999). The purpose of test score validation is not to validate the test itself, but to validate interpretations of the test scores for particular purposes or uses. Test score validation is not a quantifiable property but an ongoing process, beginning at initial conceptualization and continuing throughout the entire assessment process.

The 2013 AIMS A tests were designed and developed to provide fair and accurate ability scores that support appropriate, meaningful, and useful educational decisions. Evidence of this is also provided in Part 2 (Involvement of Arizona Educators), Part 3 (Test Design), Part 4 (Test Development), Part 5 (Test Administration), Part 6 (Data for Operational Analysis), Part 7 (Calibration, Scaling, and Scoring), Part 9 (Validity Evidence), and Part 10 (Classification). As the Technical Report has progressed, chapter by chapter, it has moved through the phases of the testing cycle. Each part of the Technical Report detailed the procedures and processes applied in the creation of AIMS A, as well as their results. Each part also highlights the meaning and significance of the procedures, processes, and results in terms of content and construct validity and the relationship to the *Standards.* Part 9.2 addresses two final issues in validity: the issues of bias and construct validity. The analyses presented here add to the perspectives provided in Parts 2 through 10. Following is a brief review.

Part 2 of the Technical Report describes the involvement of Arizona educators, and ADE in the test development process. As indicated in Part 2, the test development process and the involvement of Arizona educators in that process formed an important part of the validity of the entire AIMS A. The knowledge, expertise, and professional judgment offered by Arizona educators ultimately ensured that the content of AIMS A formed an adequate and representative sample of appropriate content and that the content formed a legitimate basis upon which to validly derive conclusions about student achievement.

Parts 3 and 4 of the Technical Report address the issue of test form development. Parts 3 and 4 provide a general discussion of test form creation and editing process, the process of selecting operational test items, the content distribution and blueprints. The test design process and the participation of Arizona

educators in the process of test creation, including item content and bias review, provide a solid rationale for having confidence in the content and design of AIMS A as a tool from which to derive valid inferences about Arizona special student performance.

Part 5 of the Technical Report describes the process, procedures, and policies that guided the administration of the AIMS A, including accommodations, security, and the written procedures provided to test administrators and school personnel.

Part 6 of the Technical Report describes classical data analysis of the spring 2013 AIMS A.

Part 7 of the Technical Report describes the calibration, scaling and equating methods, as well as processes and procedures for deriving scale scores from students' raw scores and the data cleaning steps which ensure valid calibration and scaling. Some references to introductory and advanced discussions of IRT are provided.

Part 9 of the Technical Report describes Cronbach's alpha as a measure for internal consistency for Reading, Mathematics, and Science.

Part 10 of the Technical Report describes the cut score classifications as determined by the standard setting.

Additional evidence to support the validity of the 2013 AIMS A assessments is provided by the following:

- Correlations between scores on the 2013 AIMS A tests for each grade level as construct validity were presented.
- Further evidence in support of the AIMS assessment has been documented in previous AIMS A technical reports.

9.2.1 Correlations among AIMS A Assessments

Correlations were examined between scale scores on 2013 AIMS A tests by grade level. Note that data used for the calculation of correlation included records with valid scale scores in all content areas and tests in each grade level. Sample sizes are therefore slightly lower than presented in other parts of this Technical Report. Spearman rank correlation was used to measure the degree of association between the domains because, unlike the Pearson correlation which assumes normal distribution of both variables, the Spearman correlation test does not claim any assumptions about the distributions. The lack of assumptions is especially important with this population due to a large number of non-responsive students.

All correlations are presented in Tables 9.2.1.1 through 9.2.1.7. The patterns of correlation presented in the tables are consistent with expectations given the constructs measured.

Table 9.2.1.1
2013 AIMS A Correlation between Assessments
Grade 3

Test	Math	Reading
Math	1	.819
Reading	.819	1

N=934

Table 9.2.1.2
2013 AIMS A Correlation among Assessments
Grade 4

Test	Math	Reading	Science
Math	1	.862	.857
Reading	.862	1	.881
Science	.857	.881	1

N=992

Table 9.2.1.3
2013 AIMS A Correlation between Assessments
Grade 5

Test	Math	Reading
Math	1	.861
Reading	.861	1

N=958

Table 9.2.1.4
2013 AIMS A Correlation between Assessments
Grade 6

Test	Math	Reading
Math	1	.828
Reading	.828	1

N=938

Table 9.2.1.5
2013 AIMS A Correlation between Assessments
Grade 7

Test	Math	Reading
Math	1	.839
Reading	.839	1

N=1023

Table 9.2.1.6
2013 AIMS A Correlation among Assessments
Grade 8

Test	Math	Reading	Science
Math	1	.843	.854
Reading	.843	1	.894
Science	.854	.894	1

N=976

Table 9.2.1.7
2013 AIMS A Correlation among Assessments
High School

Test	Math	Reading	Science
Math	1	.854	.854
Reading	.854	1	.896
Science	.854	.896	1

N=859

Part 10: Classification

Part 10 of this Technical Report provides information regarding classifying students into proficiency categories. The following AERA/APA/NCME standards are covered in this part: 1.5, 1.7, 2.14, 2.15, 4.9, 4.19, 4.20, 4.21, and 6.5.

Scores from the 2013 AIMS A assessments are used to classify students into one of four performance categories: Falls Far Below the Standard, Approaches the Standard, Meets the Standard, and Exceeds the Standard. This part of the Technical Report provides information regarding classifying students into these four performance categories.

10.1 Standard Setting Technical Documentation

Standard setting for the AIMS A Mathematics, Reading, and Science tests was conducted in early May 2009 using the Bookmark Standard Setting Procedure. All technical documentation regarding the standard setting is available in the 2009 AIMS A Technical Report.

Final scale score ranges for each of the four performance level categories for the AIMS A tests are presented in Table 10.1.1.

Table 10.1.1
2013 AIMS A Final Scale Score Ranges by Performance Level

Test		FFBS	AS	MS	ES
Mathematics	3	1000-1221	1222-1249	1250-1294	1295-1500
	4	1000-1221	1222-1249	1250-1301	1302-1500
	5	1000-1222	1223-1249	1250-1302	1303-1500
	6	1000-1186	1187-1249	1250-1313	1314-1500
	7	1000-1181	1182-1249	1250-1315	1316-1500
	8	1000-1200	1201-1249	1250-1300	1301-1500
	HS	1000-1198	1199-1248	1249-1328	1329-1500
Reading					
	3	1000-1210	1211-1249	1250-1301	1302-1500
	4	1000-1186	1187-1249	1250-1331	1332-1500
	5	1000-1162	1163-1249	1250-1330	1331-1500
	6	1000-1164	1165-1249	1250-1336	1337-1500
	7	1000-1181	1182-1249	1250-1339	1340-1500
	8	1000-1195	1196-1249	1250-1330	1331-1500
	HS	1000-1186	1187-1249	1250-1344	1345-1500
Science					
	4	1000-1187	1188-1249	1250-1330	1331-1500
	8	1000-1196	1197-1249	1250-1314	1315-1500
	10	1000-1196	1197-1249	1250-1308	1309-1500

Note: FFBS= Falls Far Below the Standard; AS= Approaches the Standard; MS= Meets the Standard; ES= Exceeds the Standard.

Table 10.1.2
2013 AIMS A Standard Error of Measurement at Cut Scores

		AS		MS		ES	
Test		**Cut Score**	***SEM***	**Cut Score**	***SEM***	**Cut Score**	***SEM***
Mathematics							
	3	1222	11	1250	8	1295	10
	4	1222	11	1250	9	1302	12
	5	1223	11	1250	9	1303	12
	6	1187	18	1250	13	1314	17
	7	1182	19	1250	13	1316	15
	8	1201	17	1250	12	1301	13
	HS	1199	18	1249	13	1328	16
Reading							
	3	1211	13	1250	11	1302	14
	4	1187	17	1250	12	1332	20
	5	1163	21	1250	15	1331	22
	6	1165	21	1250	15	1337	25
	7	1182	18	1250	15	1340	24
	8	1196	15	1250	11	1331	21
	HS	1187	16	1250	11	1345	24
Science							
	4	1188	16	1250	11	1331	21
	8	1197	15	1250	10	1315	15
	10	1197	12	1250	8	1309	15

Note: AS= Approaches the Standard; MS= Meets the Standard; ES= Exceeds the Standard.

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APPENDIX A:
AIMS A Eligibility Criteria

Arizona Department of Education

Alternate Assessment Eligibility Determination

08/01/2012

The Arizona Department of Education offers criterion reference tests in compliance with the US Department of Education federal regulations and guidance. Please see the Eligibility Decision Flow Chart for AIMS to guide you through which assessment would best suit your student with a disability. A student must have an Individualized Education Program (IEP) in order to be considered for participation in an alternate assessment.

AIMS A (Alternate)

- Assesses grades 3–8 and high school
- Includes mathematics, reading, and science (grades 4, 8, and 10)
- Assesses qualifying students
- in all areas
- Addresses Arizona *Alternate* Academic Content Standards
- Based on *Alternate* Academic Achievement Standards

AIMS

- Assesses grades 3–8 and high school
- Includes mathematics, reading, writing (grades 5, 6, 7, and HS), and science (grades 4, 8, and 10)
- Addresses *grade-level* Arizona Academic Content Standards
- Based on *grade-level* Academic Achievement Standards

STUDENT NAME:_____ **STUDENT ID:** _____

SAIS ID:_____ **DATE OF BIRTH:**_____ **GRADE LEVEL:**_____

SCHOOL: _____ **CASE MANAGER:** _____

AIMS A

☐ The student has an IEP with goals based on *Alternate* Academic Content Standards.

☐ The student is exposed to high quality instruction focusing on *Alternate* Academic Content Standards.

Part I: AIMS A Eligibility Requirements

In order to be considered for AIMS A, students must meet **all** three of the following criteria in all content areas that are tested: Mathematics, Reading, and Science (Science is **only** for grades 4, 8, and 10)

1. Evidence of a Significant Cognitive Disability

Empirical evidence (formal testing results, multidisciplinary evaluation team results, etc.) of a significant cognitive disability prevents the acquisition of the grade-level Arizona Academic Content Standards. Please note that students with learning disabilities who have overall intellectual and/or adaptive behavior abilities within the average range are **not** students with *most significant cognitive disabilities*. The student functions *like* a student with an intellectual disability (ID) across *all* areas: commensurate abilities in mathematics, reading, *and* writing, adaptive behavior scores, and measures of intellectual abilities.

Check disability category:

☐ MIID ☐ MOID ☐ SID
☐ MD with ID component ☐ MDSSI with ID component ☐ TBI with ID component
☐ Autism with ID component ☐ Other _____

Example 1: An eighth-grade student functioning at second-grade level in reading and writing and at fourth-grade level in mathematics does *not* qualify under criteria 1.
Example 2: A tenth-grade student functioning at the second-grade level in mathematics, reading, and writing, *does* qualify under criteria 1.

The student meets the *Evidence of a SCD* criterion for AIMS A eligibility.

☐ **Yes** ☐ **No**

2. Curricular Outcomes

The student has access to high-quality instruction based on *Alternate* Academic Standards (in all content areas tested) and the student's IEP goals and objectives focus on enrolled grade-level *Alternate* Academic Standards.

The student meets the *Curricular Outcomes* criterion for AIMS A eligibility.

☐ **Yes** ☐ **No**

3. Intensity of Instruction

Is extremely difficult for the student to acquire, maintain, generalize, and apply academic skills across environments, even with high-quality extensive/intensive, pervasive, frequent, and individualized instruction in multiple settings in all content areas tested.

The student meets the *Intensity of Instruction* criterion for AIMS A eligibility.

☐ **Yes** ☐ **No**

The student is eligible for AIMS A.

☐ **Yes** (*All* responses above are marked **Yes**.)
☐ **No** (*Any* response above is marked **No** and student must participate in AIMS.)

Parent Notification

Parents must be notified that the student's AIMS assessment will be based on Alternate Academic Achievement Standards.

Measure of Academic Achievement

The child's academic achievement will be measured by the most appropriate assessment as determined by the IEP team and the noted documentation and data. The student will participate in testing with the following assessment(s).

☐ AIMS A **Mathematics**, **Reading**, and **Science**
(Science is **only** for grades 4, 8, and 10.)

OR

☐ AIMS **Mathematics**, **Reading**, **Science**, & **Writing**
(Science is **only** for grades 4, 8, and 10 and Writing is **only** for grades 5, 6, 7 and HS.)

Potential Consequences

Are there any effects of state or local policies that would preclude completion requirements for a regular high school diploma for the child participating in either test?

☐ **Yes**

Explain: _____

_____

_____

_____

☐ **No**

Documentation Requirements for Informing Parents

If a parent or legal guardian participated in the IEP meeting during which the Alternate Assessment Eligibility Determination form was completed, then the parent attendance indicated on the IEP cover page will suffice.

☐ Parent participated at IEP meeting.

If the parent or legal guardian did **not** participate in the IEP meeting, then contact the parent to discuss the points above.

☐ Parent contacted through letter dated _____.

☐ Parent contacted via phone by _____ on _____.

Date of Alternate Assessment eligibility determination: _____

IEP team members present at Alternate Assessment eligibility determination decision:

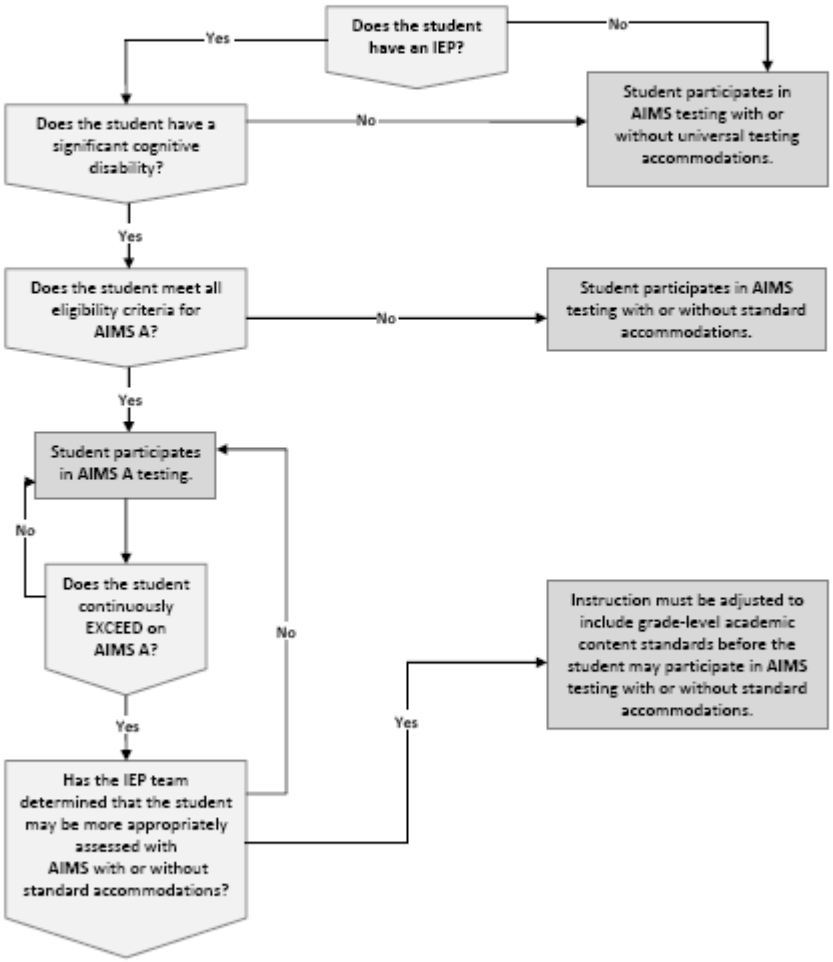
_____ _____

_____ _____

_____ _____

Eligibility Decision Flow Chart for AIMS

IEP teams must consider participation in general education assessments (AIMS 3-8 and HS), with or without standard accommodations, for students before considering participation in an alternate assessment- AIMS A (alternate achievement standards). Eligibility is determined based on the needs and abilities of each individual student. Please see the AA Eligibility Determination form for further information.



Arizona Department of Education March 2010

APPENDIX B:
Item Writer Selection Criteria

APP AIMS A Committee Participant Selection Criteria

ARIZONA DEPARTMENT OF EDUCATION

PROCEDURE FOR SELECTION OF EDUCATOR COMMITTEES

ARIZONA ASSESSMENT SECTION

Although our database contains over 1000 educators, the Assessment Section is always recruiting new teachers to serve on the committees, and have prevailed upon veteran teachers to become Ambassadors of the Assessment by encouraging their colleagues to apply.

Once Arizona educators are identified and entered into the database, the Assessment Section uses the following procedures for selecting membership for a committee:

- Identify the purpose/function of the committee
- Establish the date and time of the committee
- Determine the criteria for membership on the committee:
    - Content area of expertise
    - Grade level experience
    - Specific skill or knowledge expertise for committee function
    - Prior experience on ADE committees—a minimum 50% of each committee will have prior experience
    - Location of district/school
        - Rural/urban/suburban
        - Approximately 50% of committee members from Maricopa County when appropriate for purpose of committee
    - Ethnicity of school population or committee member
    - SES of school population
    - Number of committees served on recently—a committee member cannot serve on a series of committees used to develop items. Otherwise, they would be passing judgment on their own prior work. (This is a change in procedure)*
- Review the database for educators that meet the criteria established
- Select committee members based on criteria for particular committee for primary and alternate list
- Invitations are sent to selected committee members on primary list **
- After decline and accept emails are received by established deadline, additional invitations issued to members on alternate list
- Committee meeting held
- Review performance of participants.

  * ADE is concerned that utilizing the same committee members on a series of committees will reduce the input from a variety of educators and have requested that past committee participation be part of the selection process. As the pool of teachers expands, individual members will serve on fewer committees.

** It is not the policy to inform all members in our database of scheduled committee meetings, but only those invited to a particular meeting.

Beginning in April of 2006, all past participants have been invited to update their applications on a yearly basis in order to have the most current information in the database. Also, when Arizona educators participate on a committee, they are asked to review their information and note anything that might have changed. The application identifies the demographics of each committee member: geographic location in Arizona, ethnicity of school/district population and/or committee participant, and a detailed biographical background including participation on AIMS A committees.

In order to replace past participants who have moved, changed positions, or no longer possess the time to serve, the Arizona Department of Education Assessment Division searches in the Committee Database to find individuals that have a desire to participate to serve as a member of the item writing, or content and bias review committee. Participants can at any time submit a committee member application form to the Assessment Division. The ADE is constantly recruiting Arizona educators to serve on the various AIMS A committees as well as encouraging retention of its veteran contributors and recognizing them as excellent Ambassadors of the Assessment.

APPENDIX C:
Item Writing Committee

Item Writing Guidelines

1. Use closed stems whenever possible.
2. There should only be one correct answer.
3. Keep wording clear and simple. No Trick Questions!
4. Only use three responses (distracters)
5. Distracters must be parallel in structure.

Do's and Don'ts of Item Writing	
Don't Do	**Do – *All distracters are infinitive format***
Why did the wolf go to grandma's house? a. To find the goodies in Red's basket. b. To blow the house down. c. He needed food. ***(This distracter does not use infinitive format and is not parallel)***	Why did the wolf go to grandma's house? a. To find the goodies in Red's basket. b. To blow the house down. c. To eat the woodsman.
	Do – *Each distracter is different.*
	Why did the wolf go to grandma's house? a. He liked older women. b. To blow down the pig's house. c. Red invited him.

6. One question should not cue another.

Why couldn't the Big Bad Wolf blow down the third pig's house? (***If students get this correct they will get the second correct because this question provides the answer for the second.)*** a. It was made of straw. b. It was made of sticks. c. It was made of bricks.
Which house could <u>*NOT*</u> be blown down by the Big Bad Wolf? (***Using "not" should be avoided because kids tend to read over it, but sometimes it can't be avoided.***) a. The first pig's b. The second pig's c. The third pig's

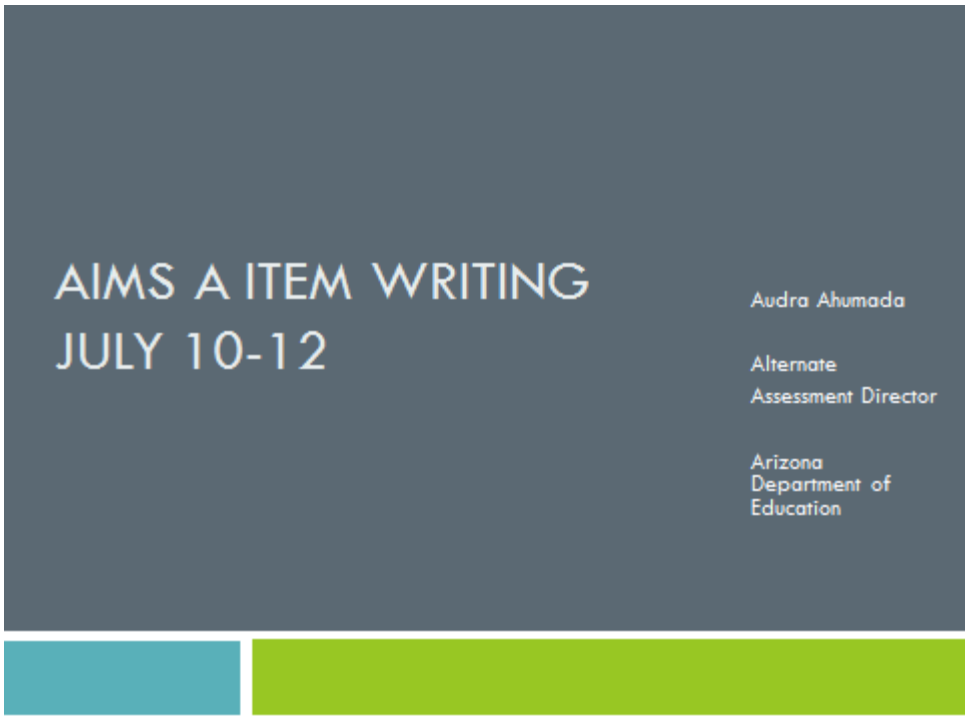
7. Distracters should all be similar in length.

Do's and Don'ts of Item Writing	
Don't Do	**Do – *Stepping format***
Why did the wolf go to grandma's house? a. He was hungry and wanted some food. b. He liked Red. c. He wanted cookies	Why did the wolf go to grandma's house? a. To find the goodies in Red's basket. b. To blow the house down. c. To eat the woodsman.
	Do – *Another Format.*
	Why did the wolf go to grandma's house? a. He liked older women. b. To blow down the pig's house. c. Red invited him for lunch.

8. Distracters should all be plausible. NO THROW AWAYS!

Don't Do -
Why did the wolf go to grandma's house? a. To eat Little Red Riding Hood. *b.* To get the basket of goodies. ***(This could be an answer based on a misreading.)*** c. He liked to wear women's clothes. ***(Even with a misreading this is not plausible and can not be supported with the text.)***

9. Identify your answer!



Item Writing Overview

- Who are our students?
- What have we learned about our assessment?
- Where are we headed?
- Development of Items

Who are our Students?

- Data collected through the Learner Characteristic Inventory From 2012
- Used to inform the National Center and State Collaborative (NCSC)
- Any surprises?

Learner Characteristic Inventory

- 6,678 inventories completed. (All data collected is teacher reported)

Student's grade

The distribution of students who participate in the AA-AAS in Western State D across IEP grade levels is relatively uniform (see Exhibit 1). Western State D did not require students in grades 9, 11, or 12 to participate in the assessment; students reported from these grades may represent respondent error.

Exhibit 1. IEP Grade Level

IEP Grade Level	n	%
Grade 3	911	13.6
Grade 4	938	14.1
Grade 5	924	13.8
Grade 6	956	14.3
Grade 7	915	13.7
Grade 8	836	12.5
Grade 9	13	0.2
Grade 10	929	13.9
Grade 11	115	1.7
Grade 12	141	2.1
Not specified	0	0.0
Total	6,678	99.9

Note. Due to rounding, numbers may exceed or be less than 100%.

5

AIMS A by Disability Category

IDEA Disability Category	n	%
Intellectual disability/mental retardation (includes mild, moderate, and profound)	3,753	56.2
Multiple disabilities	833	12.5
Autism	1,485	22.2
Speech or language impairment	19	0.3
Hearing impairment	33	0.5
Visual impairment	17	0.3
Traumatic brain injury	33	0.5
Emotional disability	73	1.1
Deaf/Blind	6	0.1
Other health impairment	159	2.4
Orthopedic	53	0.8
Other	214	3.2
Not specified	0	0.0
Total	6,678	100.1

Note. Due to rounding, numbers may exceed or be less than 100%.

Classroom Setting

Primary Classroom Setting	n	%
Special school	544	8.2
Self-contained special education classroom	4,818	72.2
Primarily self-contained special education classroom	712	10.7
Resource room/general education class	319	4.8
General education class inclusive/collaborative	285	4.3
Not specified	0	0.0
Total	6,678	100.2

Note. Due to rounding, numbers may exceed or be less than 100%.

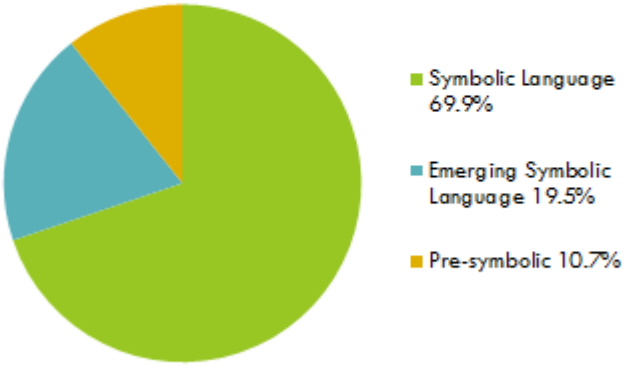
Communication

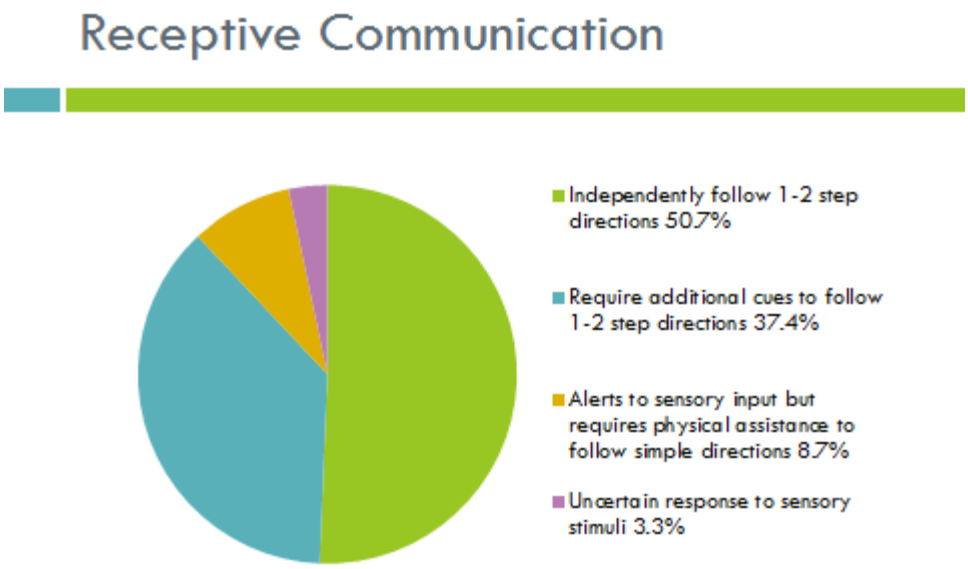
Expressive communication profile

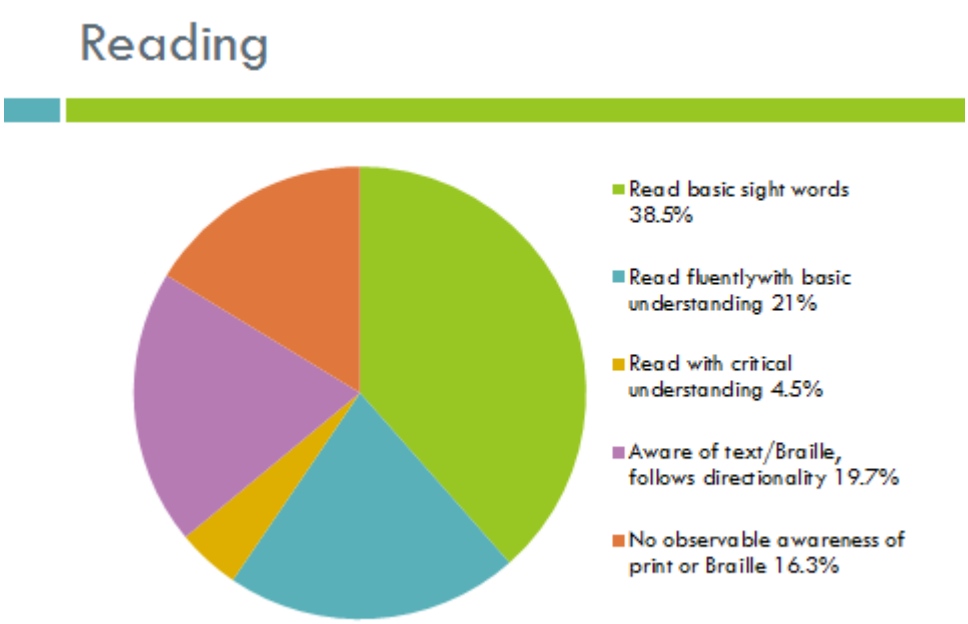
Teachers selected from among the following options for each student's expressive communication characteristics:

- Symbolic—Uses symbolic language to communicate: Student uses verbal or written words, signs, Braille, or language-based augmentative systems to request, initiate, and respond to questions, describe things or events, and express refusal;
- Emerging symbolic—Uses intentional communication, but not at a symbolic language level: Student uses understandable communication through such modes as gestures, pictures, objects/textures, points, etc., to clearly express a variety of intentions; or
- Pre-symbolic—Student communicates primarily through cries, facial expressions, change in muscle tone, etc., but no clear use of objects/textures, regularized gestures, pictures, signs, etc., to communicate.

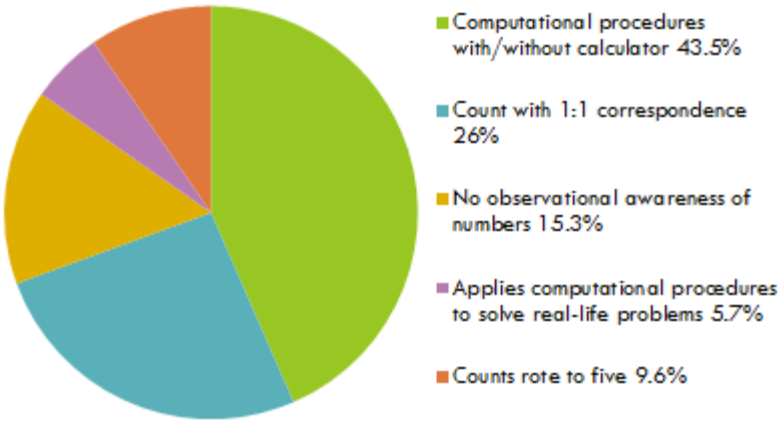
Expressive Communication







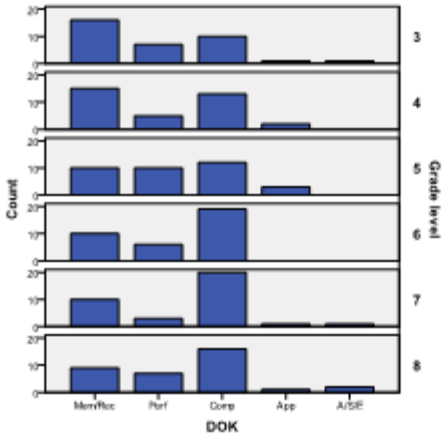
Math



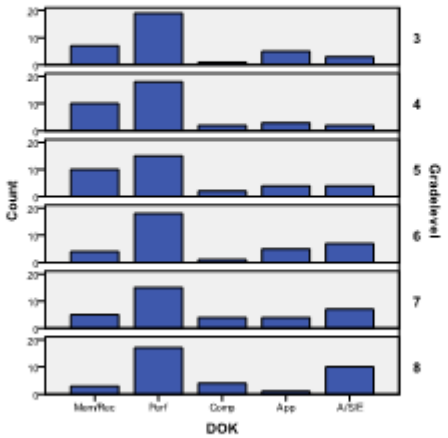
What have we learned about our assessment?

- Longitudinal Examination of Alternate Assessment Progressions (LEAAP)
- Examined content and performance expectation within a grade and across grade levels

Depth of Knowledge ELA



Depth of Knowledge Math



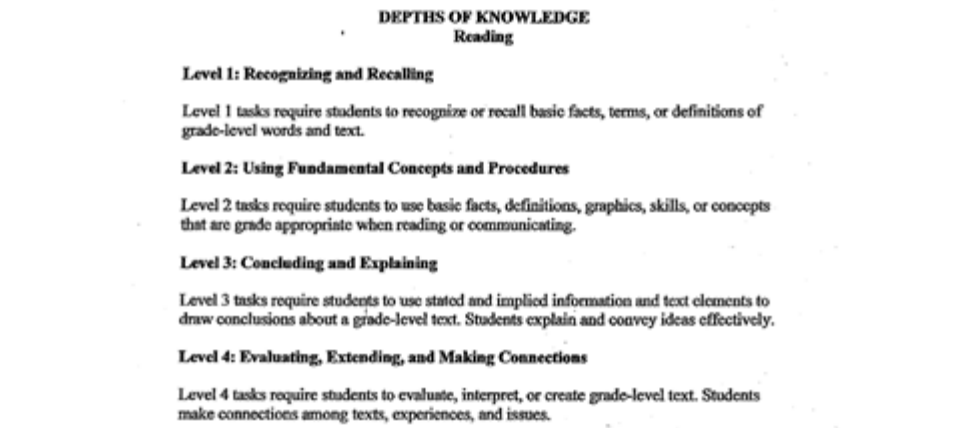
Where are we headed

- Transitioning to Common Core
- Filling in gaps in progressions
- Develop items for identified standards
- Focus will be Science, Reading and then Math
- 5 multiple choice and 5 performance tasks

Can we hit the target?

- Vocabulary
- Rigor
- Real-life application
- Practical progressions

Reading



DEPTHS OF KNOWLEDGE
Reading

Level 1: Recognizing and Recalling

Level 1 tasks require students to recognize or recall basic facts, terms, or definitions of grade-level words and text.

Level 2: Using Fundamental Concepts and Procedures

Level 2 tasks require students to use basic facts, definitions, graphics, skills, or concepts that are grade appropriate when reading or communicating.

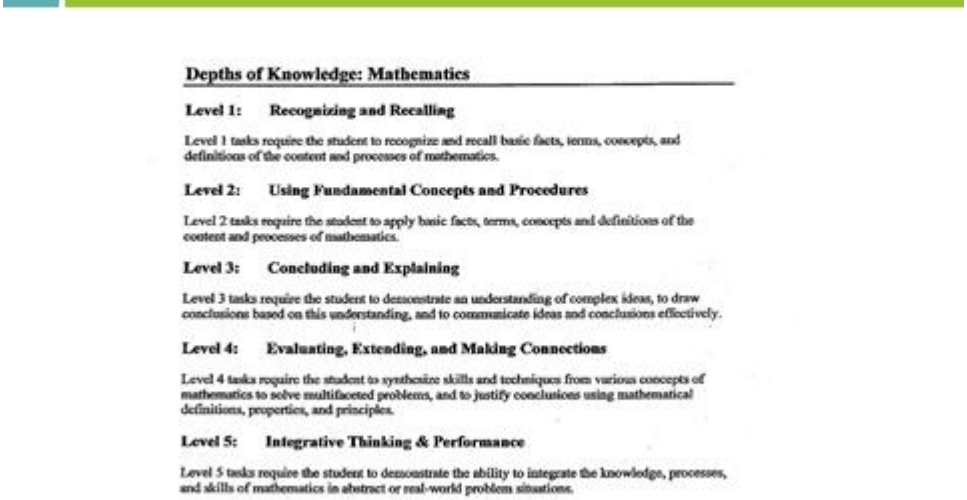
Level 3: Concluding and Explaining

Level 3 tasks require students to use stated and implied information and text elements to draw conclusions about a grade-level text. Students explain and convey ideas effectively.

Level 4: Evaluating, Extending, and Making Connections

Level 4 tasks require students to evaluate, interpret, or create grade-level text. Students make connections among texts, experiences, and issues.

Math



Depths of Knowledge: Mathematics

Level 1: Recognizing and Recalling

Level 1 tasks require the student to recognize and recall basic facts, terms, concepts, and definitions of the content and processes of mathematics.

Level 2: Using Fundamental Concepts and Procedures

Level 2 tasks require the student to apply basic facts, terms, concepts and definitions of the content and processes of mathematics.

Level 3: Concluding and Explaining

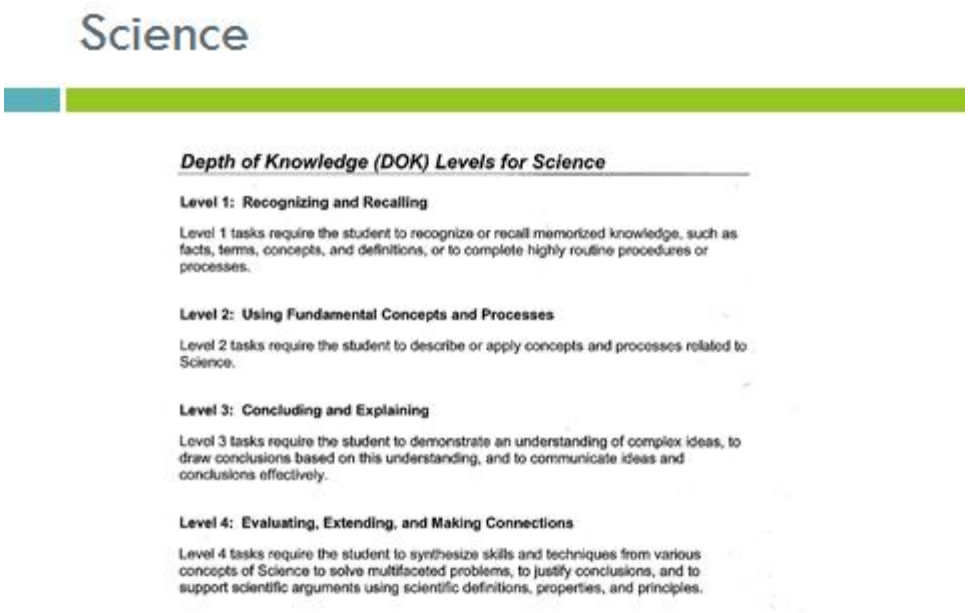
Level 3 tasks require the student to demonstrate an understanding of complex ideas, to draw conclusions based on this understanding, and to communicate ideas and conclusions effectively.

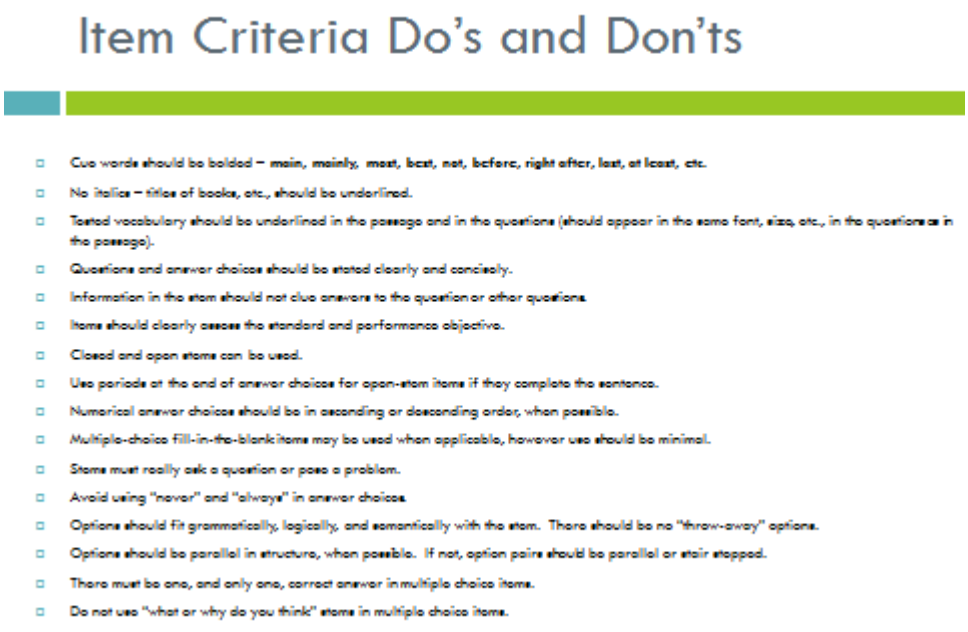
Level 4: Evaluating, Extending, and Making Connections

Level 4 tasks require the student to synthesize skills and techniques from various concepts of mathematics to solve multifaceted problems, and to justify conclusions using mathematical definitions, properties, and principles.

Level 5: Integrative Thinking & Performance

Level 5 tasks require the student to demonstrate the ability to integrate the knowledge, processes, and skills of mathematics in abstract or real-world problem situations.





Committee Feedback

- Scoring Rubric
- Demonstration Videos
- Scripted Lesson Plans
- Performance Task Materials - packaging

APPENDIX D:
2013 AIMS A Monitoring Review

The Individuals with Disabilities Education Act (IDEA) and Title I of the No Child Left Behind Act (NCLB) require the inclusion of all students with disabilities in the State assessment system. Title I further requires that the assessment results for all students be used for system accountability to ensure that the best education possible is provided to all students (Improving the Academic Achievement of the Disadvantaged, 2007).

The Arizona Department of Education (ADE) Assessment and Exceptional Student Services sections monitor the administration of Arizona's Instrument to Measure Standards Alternate (AIMS A) during the spring testing window. Assessment monitoring is conducted to ensure test validity and reliability and also for continuity in subsequent assessment years. The Individuals with Disabilities Education Act (IDEA) (300.149) requires, and state law (ARS 15-755) authorizes, monitoring and evaluation activities to determine the effectiveness of programs for meeting the educational needs of children with disabilities. These practices help to ensure that programs are carried out and educational results for children with disabilities improve.

Monitoring was conducted by external consultants as the performance tests were administered in person throughout the testing window from February 15, 2013 to March 31, 2013. The onsite testing monitors evaluated the environment in which the student was being assessed, as well as the administration of the performance tasks of the assessment. In addition to the AIMS A external consultants observing the administration of the alternate assessment, the external consultants participated in an inter-rater reliability study that more closely examined the performance task scoring rubric as a valid measurement tool for the AIMS A. Data was collected through a random sample of observations. The consultants were trained and reviewed training videos on how to use the performance task scoring rubric. The consultant's rating was then compared to the test administrator's rating. The overall inter-rater reliability percentage was 85.5%.

The external consultants evaluated information about the assessment administration, standardized activities, and data collection procedures. Teachers were selected for monitoring based on the students for whom they administered the AIMS A. Schools were randomly selected to be representative of the total population that took AIMS A in 2012. The sampling was done based on special education need, ethnicity, gender, and region. A total of 60 students were selected.

From the committee's suggestions, the following will be instituted for the AIMS A 2014 administration.

- Each district is required to designate an alternate assessment test coordinator that will participate in the mandatory online and is responsible to train all staff in their district on the proper administration and scoring of the performance tasks. Including training to address clarification of prompting, modeling, and cueing, based on recommendations from the Alternate Assessment External Consultants. Video demonstrations of the use of the performance tasks scoring rubric can be accessed on the Arizona Department of Education AIMS A web page at http://www.azed.gov/assessment/aims-a/ under the Videos and Webinars tab.
- The Performance Task will be clarified to include those definitions on prompting, modeling, and cueing provided by the National Alternate Assessment Center.

APPENDIX E:
Example Item Specification Card

Item Card

Arizona's Instrument to Measure Standards - Alternate (AIMS-A)

Reading

Item Number:	Grade Level: 4
Item Writer:	Depth of Knowledge Level (DOK): **L2 S4**
Strand: **2** (Comprehending Literary Text)	
Concept: **1** (Elements of Literature)	
PO: **2** (Indentify a solution to a problem in a story)	

Three giraffes wanted to live together. The house was too small. What should they do?

Graphic Suggestion: There should be a graphic showing 3 giraffes and a house

A go to the movies

B build a bigger house

C paint the house

Correct Answer:

B

Vocabulary levels:

K-3