

Arizona

Arizona's Instrument to Measure Standards Alternate

AIMS A

2012

Technical Report

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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 2012 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 2012 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, performance tasks, and rater items 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 regional trainings 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 three item types for each of the content areas: Multiple Choice items (presented to the student online), Performance Tasks, and Rater Items. The Multiple Choice items include a stem and three possible answer choices. The Performance Tasks are standardized, constructed response items which are scored on standardized data sheets. A 0-2 point scoring rubric has been established to assign specific score points to specific student responses. This 0-2 point scoring rubric is modified to a 0, 2, 4 point rubric to allow for equal weighting of Performance Tasks with Multiple Choice items which are translated to a 0, 4 point score. The Rater Items are constructed response items specific to the student’s environment which are scored using a similar 1-4 point rubric. This rubric is translated to a 0, 1, 2, 4 scoring rubric to allow for equal weighting of Performance Tasks with Multiple Choice items. Based on the input of Arizona educators and the results of Arizona’s Instrument to Measure Standards Alternate, a design was derived, developed, administered, and scored. 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 2012 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 committees, internal review teams consisting of various Arizona Department of Education specialists and administrators were conducted as well to support quality assurance. The test development committee and internal review team meetings included:

- Multiple Choice Item Review, conducted in June, 2011, in which the internal team reviewed each item that was administered in 2011. The team members made notations related to the overall appearance of the items; size and clarity of font and graphics; punctuation; grammar; and clarity of items and content;
- Blueprint Review and Gap Analysis, conducted June 2011, 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 review team reviewed the 2011 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 2012 administration;
- Item Writing, conducted in July 2011, in which educators wrote Multiple Choice items, and Performance Tasks aligned to the alternate content standards for possible use in the spring of 2011 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 2012 AIMS A.
- Content and Bias Review, conducted in July 2011, in which educators reviewed Multiple Choice items, and Performance Tasks, from all content areas for content, bias, and sensitivity. Items that survived these committees were eligible for inclusion on the spring 2012 AIMS A assessment;
- External Consultant Final Document Review, conducted in November 2011, 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. After they logged on to the AIMS A training system they were instructed to critique the screens utilizing a checklist to evaluate the items and online system. Consultants had a two week block of time to review the assigned grades in mathematics, reading, and science. The printed copies of all test items (multiple choice, rater items, and performance tasks) matched the test items that would be reviewed online. The consultants were informed that they could use the hard copies of the actual test to document suggested changes, but they must also document all of their comments on the provided review form;

- ADE Internal Review Team, December 2011, 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 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 the student is expected to know and is able to perform. 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
<p>Strand 1: Reading Process</p> <ul style="list-style-type: none"> Concept 1: Print Concepts Concept 3: Phonics Concept 4: Vocabulary Concept 5: Fluency Concept 6: Comprehension Strategies <p>Strand 2: Comprehending Literary Text</p> <ul style="list-style-type: none"> Concept 1: Elements of Literature <p>Strand 3: Comprehending Informational Text</p> <ul style="list-style-type: none"> Concept 1: Expository Text Concept 2: Functional Text 	<p>Strand 1: Reading Process</p> <ul style="list-style-type: none"> Concept 4: Vocabulary Concept 5: Fluency Concept 6: Comprehension Strategies <p>Strand 2: Comprehending Literary Text</p> <ul style="list-style-type: none"> Concept 1: Elements of Literature <p>Strand 3: Comprehending Informational Text</p> <ul style="list-style-type: none"> Concept 1: Expository Text Concept 2: Functional Text

Figure 3.1.2
Arizona Alternate Mathematics Strands and Concepts Grades 3 – 7

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

Figure 3.1.2
Arizona Alternate Mathematics Strands and Concepts Grades 8 and High School

Mathematics Grade 8	Mathematics Grade High School
<p>Strand 1: Number Sense and Operations</p> <ul style="list-style-type: none"> Concept 1: Number Sense Concept 2: Numerical Operations Concept 3: Estimation <p>Strand 2: Data Analysis, Probability, and Discrete Mathematics</p> <ul style="list-style-type: none"> Concept 1: Data Analysis (Statistics) Concept 2: Probability Concept 4: Vertex-Edge Graphs <p>Strand 3: Patterns, Algebra, and Functions</p> <ul style="list-style-type: none"> Concept 1: Patterns Concept 3: Algebraic Representations <p>Strand 4: Geometry and Measurement</p> <ul style="list-style-type: none"> Concept 1: Geometric Properties Concept 3: Coordinate Geometry Concept 4: Measurement <p>Strand 5: Structure and Logic</p> <ul style="list-style-type: none"> Concept 2: Logic and Reasoning 	<p>Strand 1: Number Sense and Operations</p> <ul style="list-style-type: none"> Concept 1: Number Sense Concept 2: Numerical Operations Concept 3: Estimation <p>Strand 2: Data Analysis, Probability, and Discrete Mathematics</p> <ul style="list-style-type: none"> Concept 1: Data Analysis (Statistics) Concept 2: Probability <p>Strand 3: Patterns, Algebra, and Functions</p> <ul style="list-style-type: none"> Concept 1: Patterns Concept 2: Functions and Relationships Concept 3: Algebraic Representations <p>Strand 4: Geometry and Measurement</p> <ul style="list-style-type: none"> Concept 1: Geometric Properties Concept 2: Transformation of Shapes Concept 3: Coordinate Geometry Concept 4: Measurement <p>Strand 5: Structure and Logic</p> <ul style="list-style-type: none"> 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
<p>Strand 1: Inquiry Process</p> <ul style="list-style-type: none"> Concept 1: Observations, Questions, and Hypotheses Concept 2: Scientific Testing (Investigating and Modeling) Concept 3: Analysis and Conclusions Concept 4: Communication <p>Strand 2: History and Nature of Science</p> <ul style="list-style-type: none"> Concept 1: History of Science as a Human Endeavor <p>Strand 3: Science in Personal and Social Perspectives</p> <ul style="list-style-type: none"> Concept 1: Changes in Environments Concept 2: Science and Technology in Society <p>Strand 4: Life Science</p> <ul style="list-style-type: none"> Concept 1: Characteristics of Organisms Concept 3: Organisms and Environments Concept 4: Diversity, Adaptation, and Behavior <p>Strand 5: Physical Science</p> <ul style="list-style-type: none"> Concept 3: Energy and Magnetism <p>Strand 6: Earth and Space Science</p> <ul style="list-style-type: none"> Concept 2: Earth’s Processes and Systems Concept 3: Changes in the Earth and Sky 	<p>Strand 1: Inquiry Process</p> <ul style="list-style-type: none"> Concept 1: Observations, Questions, and Hypotheses Concept 2: Scientific Testing (Investigating and Modeling) Concept 3: Analysis and Conclusions Concept 4: Communication <p>Strand 2: History and Nature of Science</p> <ul style="list-style-type: none"> Concept 1: History of Science as a Human Endeavor <p>Strand 3: Science in Personal and Social Perspectives</p> <ul style="list-style-type: none"> Concept 1: Changes in Environments Concept 2: Science and Technology in Society <p>Strand 4: Life Science</p> <ul style="list-style-type: none"> Concept 2: Reproduction and Heredity Concept 4: Diversity, Adaptation, and Behavior <p>Strand 5: Physical Science</p> <ul style="list-style-type: none"> Concept 1: Properties and Changes of Properties in Matter Concept 2: Motion and Forces

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

RDG	GRADE 3		GRADE 4		GRADE 5		GRADE 6	
	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%

RDG	GRADE 7		GRADE 8		GRADE HS	
	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						
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	
MATH	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 2012 Tests

The test blueprints were used with the processes described in Part 4 to develop all AIMS A tests administered in 2012. 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 CRT 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 CRT 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 CRT 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
2012 AIMS A Test Structure Reading

Test items and item types address all strands. Strands not represented on the 2012 AIMS A assessments will be represented on future assessments.

	Number of Items	Multiple Choice	Performance Tasks	Rater Items
Grade 3				
Strand 1 - Reading Process	17	6	11	0
Strand 2 - Comprehending Literary Text	4	3	1	0
Strand 3 - Comprehending Informational Text	9	6	3	0
Total	30	15	15	0
Grade 4				
Strand 1 - Reading Process	12	8	4	0
Strand 2 - Comprehending Literary Text	7	3	4	0
Strand 3 - Comprehending Informational Text	11	4	7	0
Total	30	15	15	0
Grade 5				
Strand 1 - Reading Process	11	6	5	0
Strand 2 - Comprehending Literary Text	6	1	5	0
Strand 3 - Comprehending Informational Text	13	8	5	0
Total	30	15	15	0
Grade 6				
Strand 1 - Reading Process	12	8	4	0
Strand 2 - Comprehending Literary Text	8	4	4	0
Strand 3 - Comprehending Informational Text	10	3	7	0
Total	30	15	15	0
Grade 7				
Strand 1 - Reading Process	15	10	5	0
Strand 2 - Comprehending Literary Text	7	0	7	0
Strand 3 - Comprehending Informational Text	8	5	3	0
Total	30	15	15	0
Grade 8				
Strand 1 - Reading Process	13	5	8	0
Strand 2 - Comprehending Literary Text	4	1	3	0
Strand 3 - Comprehending Informational Text	13	9	4	0
Total	30	15	15	0
High School				
Strand 1 - Reading Process	14	8	6	0
Strand 2 - Comprehending Literary Text	9	5	4	0
Strand 3 - Comprehending Informational Text	7	2	5	0
Total	30	15	15	0

Table 3.3.2
2012 AIMS A Test Structure Mathematics

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

Table 3.3.3
2012 AIMS A Test Structure Science

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

Table 3.3.4 Raw Score and Scale Score Ranges of AIMS A 2012 Assessments

**AIMS A 2012
Scale Scores and Performance Levels**

Gr. Performance Level	Reading		Mathematics		Science					
	Scale Score 2012	Raw Score 2012	Scale Score 2012	Raw Score 2012	Scale Score 2012	Raw Score 2012				
3rd Falls Far Below	1000-1210	0-32	1000-1221	0-24						
	1211-1249	33-60	1222-1249	25-48						
	1250-1301	61-98	1250-1294	49-91						
	1302-1500	99-120	1295-1500	92-120						
4th Falls Far Below	1000-1186	0-24	1000-1221	0-28			1000-1187	0-22		
	1187-1249	25-59	1222-1249	29-50			1188-1249	23-61		
	1250-1331	60-106	1250-1301	51-94			1250-1330	62-108		
	1332-1500	107-120	1302-1500	95-120			1331-1500	109-120		
5th Falls Far Below	1000-1162	0-25	1000-1222	0-28						
	1163-1249	26-69	1223-1249	29-50						
	1250-1330	70-106	1250-1302	51-98						
	1331-1500	107-120	1303-1500	99-120						
6th Falls Far Below	1000-1164	0-26	1000-1186	0-24						
	1165-1249	27-69	1187-1249	25-56						
	1250-1336	70-105	1250-1313	57-94						
	1337-1500	106-120	1314-1500	95-120						
7th Falls Far Below	1000-1181	0-32	1000-1181	0-18						
	1182-1249	33-69	1182-1249	19-49						
	1250-1339	70-106	1250-1315	50-93						
	1340-1500	107-120	1316-1500	94-120						
8th Falls Far Below	1000-1195	0-27	1000-1200	0-24			1000-1196	0-23		
	1196-1249	28-59	1201-1249	25-50			1197-1249	24-56		
	1250-1330	60-107	1250-1300	51-87			1250-1314	57-105		
	1331-1500	108-120	1301-1500	88-120			1315-1500	106-120		
HS Falls Far Below	1000-1186	0-20	1000-1198	0-22	1000-1196	0-20				
	1187-1249	21-62	1199-1249	23-48	1197-1249	21-65				
	1250-1344	63-111	1250-1328	49-95	1250-1308	66-109				
	1345-1500	112-120	1329-1500	96-120	1309-1500	110-120				

5/14/2012

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 2012 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 2012 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 2012 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 match 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 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 and Rater Items 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 2012 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 2012. 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
CRT Item Selection

Grade	Content	Multiple Choice	Performance Tasks	Rater Items
3	Mathematics	15	15	0
4	Mathematics	15	15	0
5	Mathematics	15	15	0
6	Mathematics	15	15	0
7	Mathematics	15	15	0
8	Mathematics	15	15	0
HS	Mathematics	15	15	0
3	Reading	15	15	0
4	Reading	15	15	0
5	Reading	15	15	0
6	Reading	15	15	0
7	Reading	15	15	0
8	Reading	15	15	0
HS	Reading	15	15	0
4	Science	15	15	0
8	Science	15	15	0
10	Science	15	15	0

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 2012 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, Performance Tasks, and Rater Items 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 2012 AIMS A assessments; however, this is not an exhaustive list of adaptations that could be utilized.

Table 5.1.1
2012 AIMS A Adaptations Provided

Adaptation	Number of Students Using 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
2012 AIMS A Test Security Agreement

Arizona’s Instrument to Measure Standards **AIMS A Test Security / Testing Ethics Agreement 2012**

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 2012 must also:

- participate in training activities prior to administering the AIMS A;
- review *AIMS A Test Administration Directions* for 2012 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 2012 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 2012 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 2012 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 www.ade.az.gov/ess/AltAssessment/AIMSA/SpedDirectors.asp.

Pre-test workshops were presented to special education directors across the state. All district special education directors were given the opportunity to attend a pre-test workshop. These workshops can be found under the title "AIMS A 2012 Fall Regional Training" at the link above. All districts were required to send a representative responsible for AIMS A coordination to attend one of the workshops for the 2012 AIMS A.

Part 6: Data for Operational Analysis

Part 6 of the Technical Report describes the data that were used for calibrating and scaling of the 2012 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 2012 assessments were administered between February 15th and March 31st. 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 (IT) department which hosts the online test and publishes the results. These steps allowed for calibration to be conducted on valid student responses at the targeted 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, performance tasks scores, and rater item 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, 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), Performance Task (PT), and Rater Item (RI). 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 rater and performance tasks subtests.

Table 6.2.1
2012 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
Math									
03	946	60	34.36	14.96	0.81	60	29.26	16.83	0.95
04	936	60	35.96	16.16	0.85	60	33.31	16.38	0.95
05	916	60	30.96	13.68	0.75	60	34.10	16.17	0.94
06	1003	60	31.52	13.88	0.76	60	34.92	16.04	0.94
07	945	60	32.56	15.56	0.81	60	35.59	16.26	0.95
08	913	60	31.32	14.36	0.77	60	34.49	16.18	0.95
HS	1036	60	31.72	14.32	0.78	60	30.45	16.39	0.95
Reading									
03	946	60	32.04	15.40	0.81	60	37.09	16.97	0.95
04	936	60	31.92	13.68	0.77	60	39.83	17.34	0.96
05	916	60	35.64	16.28	0.84	60	41.06	17.22	0.96
06	1,003	60	38.40	17.08	0.88	60	41.64	17.77	0.97
07	945	60	38.80	16.72	0.88	60	43.25	17.58	0.97
08	913	60	36.44	16.24	0.85	60	42.31	17.73	0.97
HS	1,036	60	41.52	17.00	0.89	60	41.55	19.54	0.98
Science									
04	936	60	39.16	16.56	0.87	60	40.44	17.59	0.96
08	913	60	34.92	17.08	0.86	60	41.77	16.90	0.96
10	855	60	38.68	16.52	0.87	60	41.46	18.29	0.97

Tables 6.2.2, 6.2.3, and 6.2.4 present the Lertap analysis of the 2012 AIMS A assessment standard statistics for each grade and content area tested.

Table 6.2.2
2012 AIMS A Mathematics Test Analysis

	Grade						
	3	4	5	6	7	8	HS
Number Tested	946	936	916	1,003	945	913	1,036
Minimum	0.00	0	0.00	0.00	0.00	0.00	0.00
Median	66.00	73	69.50	72.00	71.00	68.00	65.00
Mean	63.64	69.29	65.04	66.44	68.15	65.79	62.16
Maximum	119.00	120	120.00	119.00	120.00	120.00	119.00
Std. Deviation	29.78	30.63	27.38	27.48	29.52	28.17	28.14
Variance	887.08	938.14	749.88	754.92	871.20	793.68	792.08
Range	119.00	120	120.00	119.00	120.00	120.00	119.00
Interquartile Range	44.00	43	38.00	36.00	46.00	41.00	42.00
Skewness	-0.31	-0.51	-0.60	-0.72	-0.38	-0.44	-0.36
Kurtosis	-0.73	-0.49	-0.31	-0.13	-0.61	-0.38	-0.60
Min. Possible	0.00	0	0.00	0.00	0.00	0.00	0.00
Max. Possible	120.00	120	120.00	120.00	120.00	120.00	120.00
# No Response	23	29	22	28	22	29	27
% No Response	2.4%	3.1%	2.4%	2.8%	2.3%	3.2%	2.6%

Table 6.2.3
2012 AIMS A Reading Test Analysis

	Grade						
	3	4	5	6	7	8	HS
Number Tested	946	936	916	1,003	945	913	1,036
Minimum	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Median	73.00	79.00	82.00	90.00	93.00	85.00	95.00
Mean	69.11	71.75	76.72	80.02	82.05	78.74	83.06
Maximum	120.00	116.00	120.00	120.00	120.00	120.00	120.00
Std. Deviation	29.76	28.90	30.53	32.39	32.28	31.37	34.24
Variance	885.44	835.16	931.99	1,049.35	1,042.32	983.98	1,172.11
Range	120.00	116.00	120.00	120.00	120.00	120.00	120.00
Interquartile Range	41.00	37.00	41.00	46.50	46.00	43.00	50.00
Skewness	-0.57	-0.88	-0.86	-0.90	-0.97	-0.89	-0.92
Kurtosis	-0.40	0.03	0.02	-0.15	-0.02	0.10	-0.26
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	29	28	25	23	24	27	23
% No Response	3.1%	3.0%	2.7%	2.3%	2.5%	3.0%	2.2%

Table 6.2.4
2012 AIMS A Science Test Analysis

	Grade						
	3	4	5	6	7	8	10
Number Tested		936				913	855
Minimum		0.00				0.00	0.00
Median		91.00				83.00	91.00
Mean		79.60				76.68	80.13
Maximum		120.00				120.00	120.00
Std. Deviation		32.30				31.65	32.59
Variance		1,043.35				1,001.55	1,062.38
Range		120.00				120.00	120.00
Interquartile Range		47.00				45.00	44.00
Skewness		-0.93				-0.79	-0.98
Kurtosis		-0.09				-0.18	-0.03
Min. Possible		0.00				0.00	0.00
Max. Possible		120.00				120.00	120.00
# No Response		30				31	22
% No Response		3.2%				3.4%	2.6%

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
2012 AIMS A Classical Item Analysis
Mathematics Grade 3

Multiple Choice

Item	Item ID	N	P-Value	%	Correct		Distractor 1		Distractor 2		% Omit
					r_{pb}	r_{bi}	%	r_{pb}	%	r_{pb}	
1	61093022-MC	897	0.69	69%	0.37	0.48	9%	-0.37	21%	-0.28	5%
2	61093033-MC	891	0.62	62%	0.37	0.47	12%	-0.32	27%	-0.31	6%
3	61093034-MC	898	0.63	63%	0.37	0.47	14%	-0.33	29%	-0.36	5%
4	61093025-MC	906	0.79	79%	0.33	0.47	10%	-0.35	11%	-0.23	4%
5	61113003-MC	887	0.54	54%	0.33	0.41	31%	-0.28	15%	-0.28	6%
6	61093010-MC	894	0.52	52%	0.37	0.47	20%	-0.22	28%	-0.36	5%
7	61093032-MC	893	0.82	82%	0.47	0.68	8%	-0.42	10%	-0.33	6%
8	61093016-MC	889	0.70	70%	0.47	0.62	11%	-0.40	18%	-0.35	6%
9	61103015-MC	876	0.29	29%	0.00	0.00	25%	-0.13	46%	-0.01	7%
10	61103013-MC	882	0.54	54%	0.30	0.37	25%	-0.19	21%	-0.32	7%
11	61103002-MC	882	0.57	57%	0.29	0.37	19%	-0.26	24%	-0.25	7%
12	61093008-MC	887	0.48	48%	0.16	0.20	26%	-0.18	26%	-0.16	6%
13	61113001-MC	887	0.70	70%	0.39	0.52	14%	-0.34	15%	-0.31	6%
14	61113002-MC	880	0.69	69%	0.49	0.64	13%	-0.41	18%	-0.35	7%
15	61113005-MC	879	0.56	56%	0.34	0.43	23%	-0.25	21%	-0.32	7%

Performance Tasks

Item	Item ID	N	Score 0		Score 1		Score 2		Score 3		Score 4	
			%	r_{pb}								
16	61093101-PT	946	13%	-0.60	6%	-0.22	5%	-0.18	8%	-0.11	68%	0.70
17	61093103-PT	946	24%	-0.68	21%	-0.12	16%	0.13	14%	0.22	25%	0.50
18	61093104-PT	946	24%	-0.69	26%	-0.19	14%	0.12	13%	0.24	24%	0.60
19	61093105-PT	946	26%	-0.69	26%	-0.14	17%	0.18	12%	0.26	18%	0.55
20	61103101-PT	946	26%	-0.65	21%	-0.17	14%	0.08	16%	0.29	23%	0.52
21	61103102-PT	946	33%	-0.70	27%	-0.05	14%	0.21	11%	0.31	15%	0.51
22	61103103-PT	946	29%	-0.68	26%	-0.12	15%	0.16	12%	0.31	19%	0.52
23	61103104-PT	946	34%	-0.60	30%	-0.02	14%	0.26	11%	0.29	11%	0.36
24	61103105-PT	946	37%	-0.63	32%	0.07	16%	0.34	7%	0.24	8%	0.30
25	61113101-PT	946	15%	-0.64	12%	-0.26	10%	-0.10	11%	0.05	53%	0.66
26	61113102-PT	946	23%	-0.65	21%	-0.14	15%	0.13	17%	0.26	25%	0.44
27	61113103-PT	946	20%	-0.69	18%	-0.25	10%	-0.03	13%	0.14	40%	0.67
28	61113104-PT	946	23%	-0.69	19%	-0.19	15%	0.09	15%	0.25	28%	0.55
29	61113105-PT	946	22%	-0.63	20%	-0.18	17%	0.11	18%	0.26	24%	0.45
30	61123101-PT	946	21%	-0.61	23%	-0.21	19%	0.12	18%	0.27	20%	0.46

Table 6.3.2
2012 AIMS A Classical Item Analysis
Mathematics Grade 4

Multiple Choice

Item	Item ID	N	P-Value	%	Correct		Distractor 1		Distractor 2		% Omit
					r_{pb}	r_{bi}	%	r_{pb}	%	r_{pb}	
1	61094029-MC	881	0.73	73%	0.50	0.67	14%	-0.41	13%	-0.35	6%
2	61094020-MC	880	0.51	51%	0.32	0.4	30%	-0.18	19%	-0.36	6%
3	61094025-MC	881	0.81	81%	0.45	0.65	12%	-0.35	7%	-0.38	6%
4	61094019-MC	884	0.56	56%	0.42	0.53	27%	-0.42	17%	-0.21	6%
5	61094042-MC	885	0.54	54%	0.37	0.47	19%	-0.22	27%	-0.35	5%
6	61094035-MC	884	0.73	73%	0.42	0.57	15%	-0.33	12%	-0.35	6%
7	61094022-MC	885	0.68	68%	0.28	0.37	25%	-0.25	6%	-0.31	5%
8	61094040-MC	880	0.63	63%	0.56	0.72	20%	-0.40	17%	-0.42	6%
9	61104017-MC	874	0.48	48%	0.27	0.34	36%	-0.17	17%	-0.31	7%
10	61094012-MC	882	0.71	71%	0.49	0.64	11%	-0.35	18%	-0.41	6%
11	61094007-MC	878	0.66	66%	0.47	0.6	12%	-0.28	22%	-0.43	6%
12	61094003-MC	883	0.83	83%	0.47	0.7	9%	-0.35	8%	-0.40	6%
13	61094018-MC	879	0.47	47%	0.22	0.27	17%	-0.21	36%	-0.20	6%
14	61094043-MC	877	0.70	70%	0.44	0.58	13%	-0.27	17%	-0.42	6%
15	61094044-MC	878	0.53	53%	0.24	0.3	17%	-0.23	31%	-0.21	6%

Performance Tasks

Item	Item ID	N	Score 0		Score 1		Score 2		Score 3		Score 4	
			%	r_{pb}								
16	61094101-PT	936	12%	-0.66	6%	-0.23	4%	-0.15	8%	-0.12	70%	0.72
17	61104106-PT	936	10%	-0.62	10%	-0.32	5%	-0.13	8%	-0.07	67%	0.69
18	61094103-PT	936	20%	-0.69	17%	-0.17	16%	0.06	17%	0.18	30%	0.54
19	61094104-PT	936	22%	-0.71	28%	-0.14	16%	0.13	13%	0.25	22%	0.54
20	61094105-PT	936	25%	-0.70	29%	-0.12	14%	0.15	11%	0.26	22%	0.54
21	61104101-PT	936	11%	-0.63	10%	-0.32	8%	-0.13	12%	0.03	59%	0.65
22	61104102-PT	936	25%	-0.66	30%	-0.03	20%	0.22	11%	0.24	13%	0.41
23	61104103-PT	936	36%	-0.67	29%	0.04	13%	0.25	8%	0.24	13%	0.46
24	61104104-PT	936	33%	-0.67	31%	0.01	15%	0.25	7%	0.23	14%	0.47
25	61104105-PT	936	32%	-0.63	38%	0.07	15%	0.26	8%	0.29	8%	0.34
26	61114101-PT	936	17%	-0.67	15%	-0.25	11%	0.03	18%	0.18	38%	0.54
27	61114102-PT	936	21%	-0.65	22%	-0.20	10%	0.08	12%	0.16	35%	0.58
28	61114103-PT	936	21%	-0.67	21%	-0.19	9%	0.05	11%	0.14	39%	0.60
29	61114104-PT	936	12%	-0.62	10%	-0.27	11%	-0.08	26%	0.23	41%	0.42
30	61114105-PT	936	11%	-0.65	8%	-0.27	6%	-0.13	12%	-0.03	63%	0.67

Table 6.3.3
2012 AIMS A Classical Item Analysis
Mathematics Grade 5

Multiple Choice

Item	Item ID	N	P-Value	%	Correct		Distractor 1		Distractor 2		% Omit
					r_{pb}	r_{bi}	%	r_{pb}	%	r_{pb}	
1	61095009-MC	869	0.59	59%	0.35	0.44	26%	-0.38	15%	-0.20	5%
2	61095044-MC	874	0.77	77%	0.32	0.44	15%	-0.36	8%	-0.20	5%
3	61095017-MC	869	0.73	73%	0.30	0.4	14%	-0.33	13%	-0.23	5%
4	61095024-MC	871	0.74	74%	0.47	0.63	11%	-0.40	14%	-0.36	5%
5	61095043-MC	868	0.57	57%	0.33	0.42	18%	-0.35	25%	-0.23	5%
6	61095042-MC	861	0.44	44%	0.30	0.38	30%	-0.23	26%	-0.26	6%
7	61095032-MC	859	0.73	73%	0.38	0.51	9%	-0.37	18%	-0.30	6%
8	61095041-MC	865	0.45	45%	0.26	0.32	29%	-0.31	26%	-0.14	6%
9	61105003-MC	858	0.46	46%	0.29	0.36	29%	-0.24	25%	-0.25	6%
10	61095045-MC	867	0.38	38%	0.19	0.24	19%	-0.26	43%	-0.12	5%
11	61115001-MC	864	0.45	45%	0.19	0.24	30%	-0.21	25%	-0.18	6%
12	61095046-MC	862	0.54	54%	0.29	0.36	22%	-0.29	24%	-0.22	6%
13	61105019-MC	860	0.53	53%	0.23	0.29	21%	-0.23	26%	-0.22	6%
14	61105012-MC	857	0.37	37%	0.05	0.06	24%	-0.14	39%	-0.08	6%
15	61115005-MC	860	0.43	43%	0.20	0.25	25%	-0.32	32%	-0.08	6%

Performance Tasks

Item	Item ID	N	Score 0		Score 1		Score 2		Score 3		Score 4	
			%	r_{pb}								
16	61095101-PT	916	20%	-0.69	16%	-0.18	15%	0.02	15%	0.22	34%	0.54
17	61105106-PT	916	23%	-0.67	19%	-0.16	14%	0.09	21%	0.35	23%	0.41
18	61105107-PT	916	16%	-0.65	19%	-0.23	17%	0.07	21%	0.27	28%	0.43
19	61095104-PT	916	21%	-0.66	20%	-0.14	20%	0.16	17%	0.29	22%	0.35
20	61095105-PT	916	30%	-0.65	27%	0.00	21%	0.27	12%	0.29	11%	0.29
21	61105101-PT	916	13%	-0.70	12%	-0.31	10%	-0.05	16%	0.11	49%	0.61
22	61105102-PT	916	12%	-0.69	11%	-0.32	9%	-0.07	13%	0.06	55%	0.65
23	61105103-PT	916	34%	-0.59	30%	0.05	18%	0.25	10%	0.27	9%	0.29
24	61105104-PT	916	13%	-0.65	12%	-0.32	10%	-0.04	18%	0.13	47%	0.56
25	61105105-PT	916	14%	-0.63	17%	-0.26	15%	0.04	22%	0.27	33%	0.41
26	61115101-PT	916	17%	-0.69	21%	-0.17	16%	0.11	19%	0.30	27%	0.39
27	61115102-PT	916	14%	-0.69	14%	-0.30	11%	0.01	18%	0.16	43%	0.56
28	61115103-PT	916	22%	-0.71	23%	-0.10	14%	0.17	17%	0.28	25%	0.39
29	61115104-PT	916	13%	-0.68	10%	-0.33	8%	-0.05	12%	0.10	56%	0.62
30	61115105-PT	916	16%	-0.68	19%	-0.20	17%	0.06	19%	0.26	29%	0.45

Table 6.3.4
2012 AIMS A Classical Item Analysis
Mathematics Grade 6
Multiple Choice

Item	Item ID	N	P-Value	%	Correct		Distractor 1		Distractor 2		% Omit
					r_{pb}	r_{bi}	%	r_{pb}	%	r_{pb}	
1	61096036-MC	945	0.54	54%	0.35	0.43	20%	-0.25	26%	-0.32	6%
2	61096039-MC	942	0.52	52%	0.37	0.47	19%	-0.22	29%	-0.37	6%
3	61096007-MC	948	0.72	72%	0.30	0.4	16%	-0.21	11%	-0.36	5%
4	61106011-MC	937	0.41	41%	0.12	0.16	30%	-0.08	29%	-0.23	7%
5	61096027-MC	944	0.74	74%	0.33	0.45	9%	-0.24	17%	-0.35	6%
6	61096038-MC	943	0.56	56%	0.44	0.55	22%	-0.26	22%	-0.42	6%
7	61096008-MC	948	0.58	58%	0.23	0.29	19%	-0.09	23%	-0.36	5%
8	61116001-MC	941	0.53	53%	0.39	0.49	21%	-0.32	26%	-0.30	6%
9	61096040-MC	949	0.79	79%	0.38	0.53	9%	-0.28	11%	-0.37	5%
10	61096022-MC	945	0.49	49%	0.25	0.31	21%	-0.27	31%	-0.20	6%
11	61116003-MC	939	0.44	44%	0.04	0.05	25%	-0.08	31%	-0.15	6%
12	61106001-MC	940	0.47	47%	0.26	0.33	24%	-0.12	29%	-0.35	6%
13	61106002-MC	936	0.37	37%	0.04	0.05	26%	-0.15	37%	-0.06	7%
14	61106019-MC	942	0.58	58%	0.32	0.41	22%	-0.23	20%	-0.34	6%
15	61116005-MC	944	0.62	62%	0.24	0.3	12%	-0.13	25%	-0.33	6%

Performance Tasks

Item	Item ID	N	Score 0		Score 1		Score 2		Score 3		Score 4	
			%	r_{pb}								
16	61096101-PT	1,003	11%	-0.66	8%	-0.31	9%	-0.12	15%	0.00	57%	0.66
17	61096102-PT	1,003	11%	-0.64	7%	-0.31	9%	-0.12	15%	0.07	58%	0.58
18	61096103-PT	1,003	12%	-0.68	8%	-0.28	9%	-0.10	17%	0.08	54%	0.60
19	61096104-PT	1,003	12%	-0.66	12%	-0.29	11%	-0.10	14%	0.06	52%	0.64
20	61096105-PT	1,003	12%	-0.67	13%	-0.30	10%	-0.08	11%	0.05	53%	0.66
21	61106101-PT	1,003	14%	-0.67	11%	-0.26	9%	-0.02	22%	0.15	44%	0.52
22	61106102-PT	1,003	15%	-0.70	11%	-0.29	6%	-0.07	13%	0.04	55%	0.69
23	61106103-PT	1,003	26%	-0.65	30%	-0.03	19%	0.27	16%	0.35	9%	0.24
24	61106104-PT	1,003	27%	-0.66	27%	-0.05	19%	0.24	14%	0.31	13%	0.33
25	61106105-PT	1,003	15%	-0.69	15%	-0.25	12%	0.03	18%	0.21	39%	0.51
26	61116101-PT	1,003	20%	-0.67	22%	-0.13	22%	0.21	16%	0.29	20%	0.32
27	61116102-PT	1,003	22%	-0.69	21%	-0.13	17%	0.17	18%	0.29	23%	0.38
28	61116103-PT	1,003	24%	-0.62	31%	-0.03	17%	0.25	14%	0.28	14%	0.26
29	61116104-PT	1,003	19%	-0.68	22%	-0.20	14%	0.11	14%	0.25	32%	0.49
30	61116105-PT	1,003	29%	-0.65	29%	0.03	16%	0.21	11%	0.26	15%	0.35

Table 6.3.5
2012 AIMS A Classical Item Analysis
Mathematics Grade 7

Multiple Choice

Item	Item ID	N	P-Value	%	Correct		Distractor 1		Distractor 2		% Omit
					r_{pb}	r_{bi}	%	r_{pb}	%	r_{pb}	
1	61097012-MC	894	0.61	61%	0.33	0.42	28%	-0.25	11%	-0.34	5%
2	61097015-MC	898	0.44	44%	0.23	0.29	17%	-0.17	39%	-0.24	5%
3	61097034-MC	904	0.56	56%	0.39	0.49	24%	-0.33	20%	-0.27	4%
4	61097007-MC	893	0.52	52%	0.31	0.39	24%	-0.24	25%	-0.27	6%
5	61097035-MC	899	0.50	50%	0.33	0.41	15%	-0.29	35%	-0.26	5%
6	61117007-MC	893	0.58	58%	0.47	0.6	18%	-0.39	25%	-0.32	6%
7	61097037-MC	893	0.65	65%	0.38	0.48	16%	-0.30	19%	-0.31	6%
8	61097023-MC	894	0.58	58%	0.43	0.54	31%	-0.34	11%	-0.34	5%
9	61097039-MC	898	0.76	76%	0.46	0.63	14%	-0.38	10%	-0.34	5%
10	61097040-MC	899	0.47	47%	0.21	0.26	29%	-0.15	24%	-0.24	5%
11	61097010-MC	896	0.53	53%	0.30	0.37	25%	-0.16	22%	-0.34	5%
12	61097042-MC	900	0.65	65%	0.47	0.61	17%	-0.36	19%	-0.36	5%
13	61097043-MC	897	0.62	62%	0.36	0.45	13%	-0.29	25%	-0.31	5%
14	61097044-MC	893	0.58	58%	0.45	0.57	20%	-0.33	22%	-0.35	6%
15	61097008-MC	895	0.55	55%	0.36	0.45	24%	-0.21	21%	-0.37	5%

Performance Tasks

Item	Item ID	N	Score 0		Score 1		Score 2		Score 3		Score 4	
			%	r_{pb}								
16	61097101-PT	944	7.9	-0.57	10.8	-0.40	9.3	-0.16	13.0	0.00	58.9	0.66
17	61097102-PT	944	8.2	-0.57	9.9	-0.35	8.8	-0.13	14.3	0.02	58.9	0.59
18	61097103-PT	944	10.7	-0.64	8.1	-0.29	8.4	-0.14	16.2	0.01	56.7	0.62
19	61097104-PT	944	11.3	-0.58	16.7	-0.35	15.0	-0.08	16.0	0.11	40.9	0.61
20	61097105-PT	944	11.2	-0.64	10.9	-0.33	10.1	-0.12	10.8	0.01	57.0	0.68
21	61107101-PT	944	30.9	-0.61	33.6	0.02	17.8	0.25	8.5	0.28	9.2	0.33
22	61107102-PT	944	27.6	-0.60	27.8	-0.10	16.7	0.16	12.0	0.28	15.9	0.45
23	61107103-PT	944	25.3	-0.65	26.8	-0.13	19.2	0.22	13.2	0.30	15.5	0.42
24	61107104-PT	944	30.5	-0.64	29.0	-0.07	16.3	0.26	10.2	0.26	14.0	0.43
25	61107105-PT	944	24.3	-0.68	23.2	-0.18	13.8	0.13	10.7	0.22	28.1	0.56
26	61117101-PT	944	10.9	-0.60	13.3	-0.35	12.2	-0.07	18.3	0.11	45.2	0.57
27	61117102-PT	944	12.8	-0.60	14.6	-0.33	14.0	-0.04	18.3	0.16	40.3	0.55
28	61117103-PT	944	13.8	-0.65	19.4	-0.28	13.7	-0.01	15.1	0.13	38.0	0.60
29	61117104-PT	944	11.3	-0.61	10.5	-0.33	10.2	-0.09	14.1	0.07	53.9	0.60
30	61117105-PT	944	13.6	-0.65	17.6	-0.30	18.4	0.02	21.0	0.24	29.4	0.51

Table 6.3.6
2012 AIMS A Classical Item Analysis
Mathematics Grade 8

Multiple Choice

Item	Item ID	N	P-Value	%	Correct		Distractor 1		Distractor 2		% Omit
					r_{pb}	r_{bi}	%	r_{pb}	%	r_{pb}	
1	61098017-MC	861	0.56	56%	0.29	0.36	22%	-0.25	23%	-0.26	6%
2	61098019-MC	859	0.74	74%	0.39	0.53	12%	-0.34	15%	-0.32	6%
3	61098035-MC	863	0.55	55%	0.34	0.43	22%	-0.30	23%	-0.27	5%
4	61098037-MC	869	0.57	57%	0.31	0.39	20%	-0.26	24%	-0.27	5%
5	61098038-MC	860	0.57	57%	0.28	0.35	14%	-0.35	29%	-0.19	6%
6	61098039-MC	860	0.44	44%	0.18	0.22	21%	-0.24	34%	-0.13	6%
7	61108015-MC	856	0.47	47%	0.23	0.29	11%	-0.16	42%	-0.28	6%
8	61098027-MC	861	0.66	66%	0.44	0.58	10%	-0.31	24%	-0.40	6%
9	61098002-MC	859	0.79	79%	0.39	0.55	8%	-0.30	13%	-0.35	6%
10	61098028-MC	855	0.57	57%	0.39	0.49	22%	-0.29	21%	-0.33	6%
11	61098040-MC	854	0.60	60%	0.34	0.43	15%	-0.27	25%	-0.31	6%
12	61098007-MC	858	0.47	47%	0.31	0.39	26%	-0.32	27%	-0.19	6%
13	61098034-MC	852	0.55	55%	0.28	0.35	17%	-0.24	28%	-0.26	7%
14	61108014-MC	853	0.43	43%	0.18	0.23	21%	-0.17	36%	-0.20	7%
15	61118005-MC	850	0.37	37%	0.11	0.14	25%	-0.15	38%	-0.12	7%

Performance Tasks

Item	Item ID	N	Score 0		Score 1		Score 2		Score 3		Score 4	
			%	r_{pb}								
16	61098101-PT	913	10%	-0.62	10%	-0.34	10%	-0.12	17%	-0.01	53%	0.65
17	61098102-PT	913	10%	-0.59	9%	-0.33	8%	-0.11	14%	-0.02	60%	0.62
18	61098103-PT	913	11%	-0.60	11%	-0.30	10%	-0.17	15%	-0.03	55%	0.68
19	61098104-PT	913	11%	-0.61	15%	-0.31	14%	-0.08	16%	0.09	44%	0.60
20	61098105-PT	913	11%	-0.61	8%	-0.33	10%	-0.16	10%	-0.03	61%	0.69
21	61108101-PT	913	29%	-0.62	32%	-0.04	13%	0.17	10%	0.24	17%	0.46
22	61108102-PT	913	28%	-0.67	27%	-0.09	14%	0.15	14%	0.31	17%	0.48
23	61108103-PT	913	31%	-0.67	28%	-0.03	17%	0.26	12%	0.30	12%	0.40
24	61108104-PT	913	32%	-0.66	30%	-0.03	16%	0.27	12%	0.33	11%	0.38
25	61108105-PT	913	31%	-0.67	26%	-0.07	14%	0.20	10%	0.24	19%	0.51
26	61118101-PT	913	13%	-0.62	17%	-0.24	18%	-0.01	20%	0.22	32%	0.47
27	61118102-PT	913	15%	-0.63	16%	-0.26	15%	-0.03	21%	0.18	34%	0.55
28	61118103-PT	913	19%	-0.61	21%	-0.20	20%	0.13	19%	0.29	21%	0.38
29	61118104-PT	913	12%	-0.63	12%	-0.31	12%	-0.12	16%	0.11	49%	0.60
30	61118105-PT	913	13%	-0.65	15%	-0.32	12%	-0.02	17%	0.15	44%	0.56

Table 6.3.7
2012 AIMS A Classical Item Analysis
Mathematics High School

Multiple Choice

Item	Item ID	N	P-Value	%	Correct		Distractor 1		Distractor 2		% Omit
					r_{pb}	r_{bi}	%	r_{pb}	%	r_{pb}	
1	61090001-MC	981	0.57	57%	0.25	0.31	18%	-0.30	25%	-0.18	5%
2	61090004-MC	989	0.59	59%	0.36	0.45	20%	-0.29	21%	-0.30	5%
3	61090003-MC	985	0.66	66%	0.40	0.51	12%	-0.36	22%	-0.31	5%
4	61100008-MC	986	0.66	66%	0.41	0.53	24%	-0.34	9%	-0.35	5%
5	61090014-MC	976	0.54	54%	0.32	0.40	23%	-0.20	24%	-0.34	6%
6	61090006-MC	973	0.58	58%	0.43	0.55	14%	-0.30	28%	-0.38	6%
7	61090007-MC	979	0.33	33%	0.05	0.06	31%	-0.09	37%	-0.10	6%
8	61090008-MC	980	0.71	71%	0.46	0.61	15%	-0.37	14%	-0.36	5%
9	61100015-MC	989	0.78	78%	0.34	0.48	8%	-0.29	13%	-0.31	5%
10	61090010-MC	980	0.63	63%	0.38	0.49	24%	-0.28	13%	-0.37	5%
11	61090013-MC	973	0.42	42%	0.18	0.23	29%	-0.19	28%	-0.17	6%
12	61090015-MC	975	0.54	54%	0.32	0.40	25%	-0.24	21%	-0.29	6%
13	61090016-MC	972	0.54	54%	0.35	0.44	20%	-0.24	26%	-0.34	6%
14	61110005-MC	978	0.32	32%	0.11	0.14	33%	-0.13	35%	-0.12	6%
15	61100016-MC	974	0.50	50%	0.26	0.33	28%	-0.15	22%	-0.33	6%

Performance Tasks

Item	Item ID	N	Score 0		Score 1		Score 2		Score 3		Score 4	
			%	r_{pb}								
16	61090101-PT	1,036	11%	-0.56	11%	-0.32	8%	-0.12	16%	0.02	54%	0.61
17	61090102-PT	1,036	14%	-0.61	13%	-0.33	12%	-0.12	15%	0.10	46%	0.65
18	61090103-PT	1,036	17%	-0.67	14%	-0.29	11%	-0.04	12%	0.11	45%	0.66
19	61090104-PT	1,036	12%	-0.58	7%	-0.27	6%	-0.10	13%	-0.05	62%	0.61
20	61090105-PT	1,036	14%	-0.61	11%	-0.31	6%	-0.07	11%	-0.03	58%	0.68
21	61100101-PT	1,036	29%	-0.66	27%	-0.09	19%	0.28	12%	0.31	13%	0.37
22	61100102-PT	1,036	35%	-0.65	30%	0.01	17%	0.31	11%	0.34	7%	0.33
23	61100103-PT	1,036	36%	-0.70	30%	0.03	17%	0.31	10%	0.36	8%	0.36
24	61100104-PT	1,036	40%	-0.69	29%	0.08	15%	0.32	8%	0.32	8%	0.38
25	61100105-PT	1,036	38%	-0.68	25%	0.03	15%	0.25	11%	0.32	11%	0.41
26	61110101-PT	1,036	20%	-0.65	17%	-0.23	14%	0.01	17%	0.22	32%	0.55
27	61110102-PT	1,036	21%	-0.66	17%	-0.23	15%	0.09	19%	0.27	29%	0.48
28	61110103-PT	1,036	29%	-0.68	21%	-0.12	17%	0.18	14%	0.32	19%	0.44
29	61110104-PT	1,036	23%	-0.68	18%	-0.22	13%	0.06	16%	0.23	30%	0.59
30	61120101-PT	1,036	30%	-0.67	22%	-0.06	17%	0.18	14%	0.28	17%	0.44

Table 6.3.8
2012 AIMS A Classical Item Analysis
Reading Grade 3
Multiple Choice

Item	Item ID	N	P-Value	%	Correct		Distractor 1		Distractor 2		% Omit
					r_{pb}	r_{bi}	%	r_{pb}	%	r_{pb}	
1	62093030-MC	897	0.80	80%	0.40	0.57	8%	-0.25	13%	-0.39	5%
2	62093052-MC	896	0.34	34%	0.25	0.32	34%	-0.23	32%	-0.15	5%
3	62093031-MC	890	0.38	38%	0.28	0.36	25%	-0.24	37%	-0.20	6%
4	62093050-MC	889	0.66	66%	0.42	0.55	14%	-0.28	20%	-0.39	6%
5	62103005-MC	886	0.63	63%	0.37	0.47	10%	-0.31	27%	-0.32	6%
6	62103006-MC	887	0.59	59%	0.33	0.41	12%	-0.29	29%	-0.28	6%
7	62093051-MC	893	0.57	57%	0.42	0.53	20%	-0.36	23%	-0.28	6%
8	62093006-MC	883	0.61	61%	0.32	0.41	18%	-0.28	21%	-0.27	7%
9	62113003-MC	885	0.70	70%	0.50	0.66	14%	-0.35	17%	-0.41	6%
10	62103012-MC	872	0.53	53%	0.39	0.48	19%	-0.27	28%	-0.32	8%
11	62093021-MC	885	0.61	61%	0.36	0.46	21%	-0.30	18%	-0.29	6%
12	62103014-MC	874	0.53	53%	0.29	0.37	14%	-0.29	34%	-0.23	8%
13	62103002-MC	884	0.49	49%	0.27	0.34	27%	-0.29	23%	-0.17	7%
14	62103009-MC	887	0.47	47%	0.38	0.48	29%	-0.27	24%	-0.30	6%
15	62103010-MC	877	0.65	65%	0.33	0.42	14%	-0.32	21%	-0.25	7%

Performance Tasks

Item	Item ID	N	Score 0		Score 1		Score 2		Score 3		Score 4	
			%	r_{pb}								
16	62103106-PT	946	15%	-0.68	12%	-0.25	8%	-0.05	14%	0.09	52%	0.61
17	62103107-PT	946	12%	-0.70	10%	-0.31	6%	-0.08	10%	0.02	61%	0.69
18	62103108-PT	946	33%	-0.62	27%	0.06	17%	0.23	14%	0.28	9%	0.27
19	62093104-PT	946	21%	-0.65	26%	-0.11	18%	0.16	17%	0.31	18%	0.35
20	62103109-PT	946	20%	-0.67	22%	-0.13	16%	0.09	16%	0.27	26%	0.43
21	62103101-PT	946	19%	-0.69	16%	-0.17	10%	0.01	16%	0.18	39%	0.55
22	62103102-PT	946	14%	-0.69	12%	-0.26	11%	-0.04	16%	0.12	47%	0.59
23	62103103-PT	946	14%	-0.72	12%	-0.25	8%	-0.07	15%	0.12	51%	0.61
24	62103104-PT	946	13%	-0.68	10%	-0.28	9%	-0.05	16%	0.06	52%	0.62
25	62103105-PT	946	23%	-0.67	17%	-0.17	14%	0.14	19%	0.29	26%	0.42
26	62113101-PT	946	15%	-0.66	13%	-0.27	11%	0.03	17%	0.16	43%	0.52
27	62113102-PT	946	21%	-0.65	23%	-0.10	17%	0.15	16%	0.24	24%	0.38
28	62113103-PT	946	16%	-0.71	14%	-0.20	12%	0.02	16%	0.15	42%	0.55
29	62113104-PT	946	12%	-0.69	8%	-0.33	6%	-0.13	8%	-0.06	67%	0.76
30	62113105-PT	946	12%	-0.71	9%	-0.29	6%	-0.10	8%	-0.02	64%	0.72

Table 6.3.9
2012 AIMS A Classical Item Analysis
Reading Grade 4
Multiple Choice

Item	Item ID	N	P-Value	%	Correct		Distractor 1		Distractor 2		% Omit
					r_{pb}	r_{bi}	%	r_{pb}	%	r_{pb}	
1	62094030-MC	887	0.83	83%	0.39	0.57	8%	-0.25	9%	-0.40	5%
2	62094035-MC	878	0.68	68%	0.47	0.61	18%	-0.45	14%	-0.29	6%
3	62094032-MC	884	0.67	67%	0.44	0.57	20%	-0.41	13%	-0.30	6%
4	62104001-MC	874	0.64	64%	0.47	0.6	19%	-0.44	17%	-0.30	7%
5	62094028-MC	874	0.65	65%	0.39	0.51	15%	-0.22	20%	-0.43	7%
6	62104002-MC	868	0.66	66%	0.34	0.44	15%	-0.17	19%	-0.43	7%
7	62104003-MC	880	0.70	70%	0.21	0.28	11%	-0.07	19%	-0.36	6%
8	62104007-MC	874	0.61	61%	0.24	0.31	15%	-0.16	23%	-0.32	7%
9	62104008-MC	875	0.47	47%	0.25	0.31	26%	-0.33	27%	-0.13	7%
10	62094001-MC	879	0.71	71%	0.18	0.24	14%	-0.14	15%	-0.28	6%
11	62104009-MC	872	0.56	56%	0.24	0.3	18%	-0.16	26%	-0.31	7%
12	62104010-MC	873	0.46	46%	0.35	0.44	25%	-0.32	29%	-0.24	7%
13	62114003-MC	867	0.28	28%	-0.03	-0.04	45%	-0.01	27%	-0.11	7%
14	62104005-MC	878	0.17	17%	-0.19	-0.28	24%	-0.28	58%	0.29	6%
15	62104014-MC	881	0.41	41%	0.20	0.25	24%	-0.16	35%	-0.22	6%

Performance Tasks

Item	Item ID	N	Score 0		Score 1		Score 2		Score 3		Score 4	
			%	r_{pb}								
16	62094101-PT	936	12%	-0.66	18%	-0.19	18%	0.04	19%	0.19	32%	0.43
17	62094102-PT	936	12%	-0.68	16%	-0.30	16%	0.02	19%	0.16	36%	0.54
18	62094103-PT	936	13%	-0.69	15%	-0.28	15%	0.03	17%	0.17	39%	0.54
19	62094104-PT	936	10%	-0.71	8%	-0.30	10%	-0.09	18%	0.08	53%	0.58
20	62094105-PT	936	13%	-0.71	13%	-0.30	12%	-0.05	14%	0.10	49%	0.64
21	62104101-PT	936	12%	-0.73	9%	-0.26	10%	-0.09	17%	0.10	52%	0.59
22	62104102-PT	936	16%	-0.68	17%	-0.20	15%	0.07	24%	0.29	28%	0.40
23	62104103-PT	936	12%	-0.73	12%	-0.29	9%	-0.04	15%	0.10	51%	0.62
24	62104104-PT	936	11%	-0.72	9%	-0.29	8%	-0.10	15%	0.07	56%	0.62
25	62104105-PT	936	12%	-0.72	11%	-0.27	9%	-0.08	17%	0.12	52%	0.59
26	62114101-PT	936	12%	-0.73	8%	-0.30	7%	-0.11	14%	0.01	59%	0.69
27	62114102-PT	936	17%	-0.68	19%	-0.23	13%	0.09	20%	0.22	32%	0.49
28	62114103-PT	936	15%	-0.72	15%	-0.26	12%	0.00	17%	0.16	41%	0.59
29	62114104-PT	936	13%	-0.71	14%	-0.25	15%	0.01	19%	0.23	40%	0.47
30	62114105-PT	936	15%	-0.71	19%	-0.20	14%	0.08	15%	0.18	36%	0.50

Table 6.3.10
2012 AIMS A Classical Item Analysis
Reading Grade 5

Multiple Choice

Item	Item ID	N	P-Value	%	Correct		Distractor 1		Distractor 2		% Omit
					r_{pb}	r_{bi}	%	r_{pb}	%	r_{pb}	
1	62095001-MC	871	0.76	76%	0.39	0.54	9%	-0.28	15%	-0.36	5%
2	62095002-MC	867	0.59	59%	0.37	0.47	23%	-0.28	17%	-0.32	5%
3	62105001-MC	865	0.66	66%	0.43	0.55	20%	-0.35	14%	-0.32	6%
4	62095006-MC	870	0.59	59%	0.47	0.59	17%	-0.26	24%	-0.42	5%
5	62095007-MC	866	0.66	66%	0.27	0.35	22%	-0.23	12%	-0.27	5%
6	62095008-MC	859	0.68	68%	0.46	0.61	12%	-0.35	20%	-0.37	6%
7	62095009-MC	864	0.56	56%	0.35	0.44	15%	-0.25	29%	-0.31	6%
8	62095011-MC	865	0.67	67%	0.45	0.59	13%	-0.28	19%	-0.42	6%
9	62095012-MC	864	0.63	63%	0.47	0.6	17%	-0.38	20%	-0.33	6%
10	62105012-MC	864	0.73	73%	0.25	0.33	13%	-0.18	13%	-0.29	6%
11	62115006-MC	859	0.54	54%	0.45	0.56	26%	-0.31	21%	-0.35	6%
12	62105011-MC	860	0.61	61%	0.36	0.46	20%	-0.30	19%	-0.29	6%
13	62115004-MC	863	0.68	68%	0.43	0.56	17%	-0.39	15%	-0.29	6%
14	62115005-MC	862	0.60	60%	0.45	0.57	16%	-0.32	24%	-0.36	6%
15	62105008-MC	863	0.48	48%	0.26	0.33	29%	-0.23	24%	-0.21	6%

Performance Tasks

Item	Item ID	N	Score 0		Score 1		Score 2		Score 3		Score 4	
			%	r_{pb}								
16	62095101-PT	916	11%	-0.70	8%	-0.33	9%	-0.07	16%	0.06	57%	0.62
17	62095102-PT	916	12%	-0.70	10%	-0.32	9%	-0.07	16%	0.11	53%	0.60
18	62095103-PT	916	14%	-0.73	11%	-0.21	16%	0.01	19%	0.17	39%	0.50
19	62095104-PT	916	11%	-0.70	8%	-0.34	9%	-0.09	15%	0.09	57%	0.61
20	62095105-PT	916	11%	-0.73	9%	-0.33	7%	-0.12	12%	0.03	61%	0.69
21	62105101-PT	916	13%	-0.73	10%	-0.26	9%	-0.05	19%	0.14	48%	0.56
22	62105102-PT	916	14%	-0.72	11%	-0.20	16%	0.02	24%	0.26	35%	0.40
23	62105103-PT	916	12%	-0.68	10%	-0.30	15%	0.01	28%	0.28	35%	0.38
24	62105104-PT	916	11%	-0.73	8%	-0.32	8%	-0.12	17%	0.11	57%	0.62
25	62105105-PT	916	15%	-0.75	14%	-0.20	19%	0.10	24%	0.31	28%	0.37
26	62115101-PT	916	12%	-0.71	11%	-0.31	14%	-0.02	16%	0.15	47%	0.56
27	62115102-PT	916	14%	-0.72	14%	-0.28	14%	0.07	24%	0.26	34%	0.45
28	62115103-PT	916	14%	-0.75	10%	-0.23	13%	0.00	19%	0.16	42%	0.54
29	62115104-PT	916	15%	-0.70	17%	-0.21	14%	0.06	20%	0.22	35%	0.46
30	62115105-PT	916	13%	-0.74	10%	-0.28	9%	-0.03	13%	0.08	55%	0.64

Table 6.3.11
2012 AIMS A Classical Item Analysis
Reading Grade 6
Multiple Choice

Item	Item ID	N	P-Value	%	Correct		Distractor 1		Distractor 2		% Omit
					r_{pb}	r_{bi}	%	r_{pb}	%	r_{pb}	
1	62096010-MC	953	0.74	74%	0.45	0.62	14%	-0.35	11%	-0.36	5%
2	62096009-MC	945	0.75	75%	0.51	0.69	12%	-0.39	13%	-0.38	6%
3	62096014-MC	945	0.70	70%	0.42	0.55	16%	-0.30	14%	-0.37	6%
4	62106003-MC	947	0.71	71%	0.44	0.59	12%	-0.43	17%	-0.28	6%
5	62096004-MC	951	0.68	68%	0.36	0.47	13%	-0.22	19%	-0.36	5%
6	62106001-MC	946	0.74	74%	0.50	0.67	14%	-0.38	12%	-0.38	6%
7	62116001-MC	949	0.68	68%	0.47	0.61	21%	-0.44	12%	-0.26	5%
8	62106010-MC	945	0.77	77%	0.55	0.77	7%	-0.30	15%	-0.51	6%
9	62116002-MC	945	0.51	51%	0.43	0.54	27%	-0.20	23%	-0.43	6%
10	62096007-MC	935	0.78	78%	0.45	0.62	10%	-0.38	12%	-0.33	7%
11	62096002-MC	938	0.74	74%	0.57	0.78	10%	-0.36	16%	-0.48	6%
12	62096003-MC	945	0.71	71%	0.46	0.61	16%	-0.40	13%	-0.31	6%
13	62096011-MC	946	0.65	65%	0.44	0.56	14%	-0.25	21%	-0.41	6%
14	62106004-MC	939	0.63	63%	0.47	0.6	16%	-0.37	21%	-0.34	6%
15	62106007-MC	937	0.40	40%	0.18	0.22	34%	0.05	26%	-0.39	7%

Performance Tasks

Item	Item ID	N	Score 0		Score 1		Score 2		Score 3		Score 4	
			%	r_{pb}								
16	62096101-PT	1,003	18%	-0.68	20%	-0.15	17%	0.10	20%	0.26	26%	0.42
17	62096102-PT	1,003	11%	-0.70	11%	-0.31	10%	-0.08	18%	0.09	51%	0.61
18	62096103-PT	1,003	12%	-0.72	10%	-0.29	11%	-0.06	18%	0.12	49%	0.59
19	62096104-PT	1,003	11%	-0.71	9%	-0.27	9%	-0.15	21%	0.13	50%	0.58
20	62096105-PT	1,003	11%	-0.70	11%	-0.28	12%	0.01	25%	0.19	40%	0.46
21	62106101-PT	1,003	14%	-0.69	15%	-0.24	14%	0.06	30%	0.33	27%	0.34
22	62106102-PT	1,003	12%	-0.72	11%	-0.29	11%	-0.07	17%	0.12	48%	0.60
23	62106103-PT	1,003	12%	-0.71	11%	-0.26	13%	-0.03	21%	0.21	42%	0.48
24	62106104-PT	1,003	12%	-0.74	10%	-0.27	10%	-0.15	14%	0.06	55%	0.69
25	62106105-PT	1,003	14%	-0.74	10%	-0.24	11%	-0.03	21%	0.16	45%	0.55
26	62116101-PT	1,003	13%	-0.77	10%	-0.27	8%	-0.07	11%	0.02	58%	0.70
27	62116102-PT	1,003	12%	-0.75	10%	-0.30	7%	-0.09	12%	0.04	59%	0.70
28	62116103-PT	1,003	12%	-0.74	12%	-0.30	10%	-0.05	15%	0.10	51%	0.64
29	62116104-PT	1,003	11%	-0.74	9%	-0.30	9%	-0.14	11%	0.03	61%	0.70
30	62116105-PT	1,003	12%	-0.76	9%	-0.30	8%	-0.10	11%	0.06	60%	0.70

Table 6.3.12
2012 AIMS A Classical Item Analysis
Reading Grade 7

Multiple Choice

Item	Item ID	N	P-Value	%	Correct		Distractor 1		Distractor 2		% Omit
					r_{pb}	r_{bi}	%	r_{pb}	%	r_{pb}	
1	62097007-MC	893	0.75	75%	0.42	0.57	10%	-0.24	15%	-0.42	6%
2	62097006-MC	898	0.57	57%	0.51	0.64	18%	-0.32	24%	-0.41	5%
3	62097003-MC	891	0.62	62%	0.53	0.68	19%	-0.38	19%	-0.39	6%
4	62097004-MC	894	0.76	76%	0.45	0.62	11%	-0.26	13%	-0.45	5%
5	62097005-MC	894	0.57	57%	0.51	0.64	22%	-0.40	21%	-0.33	5%
6	62117001-MC	899	0.78	78%	0.58	0.80	11%	-0.39	12%	-0.47	5%
7	62107005-MC	890	0.32	32%	0.10	0.13	31%	-0.14	38%	-0.08	6%
8	62097010-MC	896	0.70	70%	0.50	0.65	13%	-0.31	17%	-0.44	5%
9	62107006-MC	890	0.59	59%	0.31	0.39	24%	-0.12	17%	-0.43	6%
10	62097008-MC	891	0.78	78%	0.41	0.58	8%	-0.23	14%	-0.42	6%
11	62097002-MC	891	0.77	77%	0.51	0.71	9%	-0.37	14%	-0.42	6%
12	62097001-MC	897	0.71	71%	0.50	0.67	12%	-0.39	16%	-0.38	5%
13	62097015-MC	890	0.81	81%	0.49	0.70	8%	-0.30	11%	-0.45	6%
14	62107004-MC	896	0.68	68%	0.39	0.51	16%	-0.25	16%	-0.37	5%
15	62107002-MC	896	0.84	84%	0.49	0.73	9%	-0.38	7%	-0.38	5%

Performance Tasks

Item	Item ID	N	Score 0		Score 1		Score 2		Score 3		Score 4	
			%	r_{pb}								
16	62097101-PT	944	48%	0.59	17%	0.14	10%	-0.09	11%	-0.31	13%	-0.66
17	62097102-PT	944	44%	0.57	19%	0.17	11%	-0.03	11%	-0.29	14%	-0.71
18	62107106-PT	944	59%	0.69	15%	-0.03	8%	-0.11	9%	-0.38	9%	-0.66
19	62097104-PT	944	62%	0.68	13%	0.02	7%	-0.14	9%	-0.41	9%	-0.65
20	62097105-PT	944	52%	0.62	16%	0.09	10%	-0.10	9%	-0.31	11%	-0.69
21	62107101-PT	944	31%	0.41	27%	0.26	16%	0.02	15%	-0.25	12%	-0.69
22	62107102-PT	944	48%	0.59	18%	0.10	12%	-0.08	13%	-0.34	9%	-0.66
23	62107103-PT	944	54%	0.66	14%	0.07	11%	-0.13	11%	-0.33	10%	-0.68
24	62107104-PT	944	66%	0.71	12%	-0.02	6%	-0.16	8%	-0.37	9%	-0.68
25	62107105-PT	944	56%	0.66	15%	0.02	8%	-0.10	10%	-0.32	10%	-0.69
26	62117101-PT	944	60%	0.69	15%	0.00	7%	-0.13	9%	-0.39	9%	-0.69
27	62117102-PT	944	44%	0.53	22%	0.19	12%	-0.07	11%	-0.32	12%	-0.68
28	62117103-PT	944	54%	0.65	14%	0.07	10%	-0.08	10%	-0.30	12%	-0.73
29	62117104-PT	944	57%	0.65	14%	0.06	10%	-0.13	9%	-0.33	10%	-0.69
30	62117105-PT	944	49%	0.63	15%	0.09	11%	-0.07	13%	-0.30	12%	-0.69

Table 6.3.13
2012 AIMS A Classical Item Analysis
Reading Grade 8
Multiple Choice

Item	Item ID	N	P-Value	%	Correct		Distractor 1		Distractor 2		% Omit
					r_{pb}	r_{bi}	%	r_{pb}	%	r_{pb}	
1	62128001-MC	852	0.55	55%	0.48	0.60	22%	-0.36	23%	-0.34	7%
2	62098007-MC	862	0.88	88%	0.37	0.61	7%	-0.35	5%	-0.27	6%
3	62128002-MC	850	0.53	53%	0.36	0.45	19%	-0.19	28%	-0.37	7%
4	62098010-MC	865	0.62	62%	0.44	0.56	22%	-0.39	16%	-0.28	5%
5	62098009-MC	858	0.66	66%	0.37	0.48	17%	-0.35	17%	-0.26	6%
6	62098008-MC	862	0.88	88%	0.40	0.65	4%	-0.24	8%	-0.40	6%
7	62098006-MC	855	0.58	58%	0.49	0.62	19%	-0.37	23%	-0.35	6%
8	62098011-MC	853	0.67	67%	0.43	0.55	16%	-0.35	17%	-0.33	7%
9	62098012-MC	852	0.68	68%	0.44	0.57	18%	-0.31	14%	-0.38	7%
10	62098013-MC	855	0.65	65%	0.40	0.52	15%	-0.28	20%	-0.36	6%
11	62098003-MC	861	0.55	55%	0.29	0.37	22%	-0.29	23%	-0.21	6%
12	62108012-MC	858	0.33	33%	0.22	0.29	33%	-0.26	34%	-0.09	6%
13	62108011-MC	853	0.62	62%	0.39	0.50	22%	-0.29	16%	-0.34	7%
14	62118005-MC	858	0.81	81%	0.47	0.68	11%	-0.36	8%	-0.38	6%
15	62108013-MC	855	0.68	68%	0.45	0.58	19%	-0.32	13%	-0.38	6%

Performance Tasks

Item	Item ID	N	Score 0		Score 1		Score 2		Score 3		Score 4	
			%	r_{pb}								
16	62098101-PT	913	14%	-0.70	12%	-0.26	10%	-0.05	15%	0.11	49%	0.61
17	62098102-PT	913	9%	-0.64	8%	-0.38	7%	-0.16	16%	0.02	59%	0.65
18	62098103-PT	913	12%	-0.69	9%	-0.33	8%	-0.07	18%	0.07	53%	0.62
19	62098104-PT	913	15%	-0.73	14%	-0.23	10%	-0.06	14%	0.14	47%	0.62
20	62098105-PT	913	11%	-0.68	9%	-0.33	8%	-0.12	14%	0.07	57%	0.64
21	62108101-PT	913	12%	-0.69	10%	-0.34	11%	-0.10	16%	0.09	51%	0.65
22	62108102-PT	913	15%	-0.70	12%	-0.28	11%	-0.02	21%	0.20	41%	0.55
23	62108103-PT	913	12%	-0.68	12%	-0.32	15%	-0.05	16%	0.14	44%	0.59
24	62108104-PT	913	16%	-0.69	13%	-0.26	15%	0.08	23%	0.26	33%	0.43
25	62108105-PT	913	13%	-0.68	13%	-0.32	17%	0.01	26%	0.31	31%	0.43
26	62118101-PT	913	10%	-0.70	10%	-0.36	8%	-0.09	14%	0.01	58%	0.69
27	62118102-PT	913	10%	-0.68	9%	-0.35	7%	-0.09	15%	0.01	59%	0.66
28	62118103-PT	913	11%	-0.70	8%	-0.32	11%	-0.12	17%	0.06	53%	0.65
29	62118104-PT	913	9%	-0.67	10%	-0.39	8%	-0.14	11%	0.00	62%	0.71
30	62118105-PT	913	12%	-0.69	10%	-0.32	10%	-0.04	17%	0.08	52%	0.60

Table 6.3.14
2012 AIMS A Classical Item Analysis
Reading High School

Multiple Choice

Item	Item ID	N	P-Value	%	Correct		Distractor 1		Distractor 2		% Omit
					r_{pb}	r_{bi}	%	r_{pb}	%	r_{pb}	
1	62090013-MC	996	0.88	88%	0.46	0.76	7%	-0.38	5%	-0.34	4%
2	62090009-MC	988	0.83	83%	0.52	0.76	9%	-0.40	9%	-0.39	5%
3	62100001-MC	979	0.69	69%	0.39	0.51	13%	-0.22	18%	-0.41	6%
4	62100003-MC	985	0.71	71%	0.62	0.82	12%	-0.41	16%	-0.48	5%
5	62100004-MC	983	0.71	71%	0.45	0.59	16%	-0.25	13%	-0.46	5%
6	62110001-MC	979	0.76	76%	0.41	0.56	10%	-0.39	14%	-0.28	6%
7	62100008-MC	979	0.77	77%	0.45	0.63	15%	-0.34	9%	-0.39	6%
8	62090007-MC	978	0.77	77%	0.47	0.65	9%	-0.27	14%	-0.45	6%
9	62090008-MC	982	0.73	73%	0.57	0.77	13%	-0.44	14%	-0.41	5%
10	62100010-MC	975	0.65	65%	0.46	0.59	13%	-0.36	22%	-0.34	6%
11	62090012-MC	978	0.71	71%	0.45	0.60	17%	-0.32	12%	-0.40	6%
12	62090011-MC	982	0.82	82%	0.53	0.78	10%	-0.41	7%	-0.40	5%
13	62110002-MC	974	0.57	57%	0.47	0.59	25%	-0.20	18%	-0.51	6%
14	62110003-MC	972	0.60	60%	0.29	0.36	25%	-0.22	15%	-0.30	6%
15	62110004-MC	974	0.76	76%	0.44	0.61	9%	-0.30	15%	-0.40	6%

Performance Tasks

Item	Item ID	N	Score 0		Score 1		Score 2		Score 3		Score 4	
			%	r_{pb}								
16	62090101-PT	1,036	14%	-0.69	11%	-0.33	9%	-0.06	18%	0.15	47%	0.61
17	62090102-PT	1,036	11%	-0.68	9%	-0.38	6%	-0.13	13%	-0.03	61%	0.73
18	62090103-PT	1,036	12%	-0.71	10%	-0.38	7%	-0.11	14%	0.01	58%	0.73
19	62090104-PT	1,036	12%	-0.74	7%	-0.33	7%	-0.16	12%	-0.04	61%	0.78
20	62090105-PT	1,036	11%	-0.69	8%	-0.38	6%	-0.16	11%	-0.06	64%	0.78
21	62100101-PT	1,036	13%	-0.72	8%	-0.34	8%	-0.15	11%	0.01	60%	0.76
22	62100102-PT	1,036	18%	-0.78	10%	-0.25	10%	-0.03	17%	0.15	46%	0.65
23	62100103-PT	1,036	14%	-0.72	10%	-0.36	8%	-0.09	13%	0.06	54%	0.72
24	62100104-PT	1,036	14%	-0.74	9%	-0.32	8%	-0.10	12%	0.06	55%	0.73
25	62100105-PT	1,036	15%	-0.72	9%	-0.32	7%	-0.07	11%	0.03	58%	0.72
26	62110101-PT	1,036	15%	-0.72	13%	-0.34	10%	-0.04	12%	0.11	51%	0.69
27	62110102-PT	1,036	15%	-0.75	13%	-0.32	8%	-0.03	11%	0.08	53%	0.72
28	62110103-PT	1,036	15%	-0.73	14%	-0.31	11%	-0.03	12%	0.14	48%	0.66
29	62110104-PT	1,036	19%	-0.69	17%	-0.22	13%	0.06	19%	0.26	31%	0.50
30	62110105-PT	1,036	22%	-0.69	18%	-0.19	13%	0.12	15%	0.23	31%	0.51

Table 6.3.15
2012 AIMS A Classical Item Analysis
Science Grade 4

Multiple Choice

Item	Item ID	N	P-Value	%	Correct		Distractor 1		Distractor 2		% Omit
					r_{pb}	r_{bi}	%	r_{pb}	%	r_{pb}	
1	64094015-MC	886	0.71	71%	0.25	0.33	20%	-0.19	10%	-0.31	5%
2	64094016-MC	889	0.68	68%	0.55	0.71	20%	-0.51	12%	-0.29	5%
3	64094021-MC	882	0.80	80%	0.48	0.68	11%	-0.45	9%	-0.30	6%
4	64094019-MC	886	0.69	69%	0.47	0.62	16%	-0.44	15%	-0.28	5%
5	64094022-MC	881	0.82	82%	0.39	0.57	10%	-0.31	9%	-0.34	6%
6	64114001-MC	869	0.56	56%	0.43	0.54	22%	-0.42	22%	-0.23	7%
7	64114002-MC	883	0.79	79%	0.44	0.62	11%	-0.33	10%	-0.37	6%
8	64104007-MC	874	0.59	59%	0.15	0.19	15%	-0.17	26%	-0.19	7%
9	64104008-MC	879	0.66	66%	0.56	0.72	20%	-0.48	15%	-0.32	6%
10	64094013-MC	877	0.69	69%	0.41	0.54	15%	-0.28	16%	-0.38	6%
11	64094003-MC	883	0.78	78%	0.55	0.77	9%	-0.34	13%	-0.49	6%
12	64094025-MC	879	0.79	79%	0.50	0.7	9%	-0.35	12%	-0.42	6%
13	64104005-MC	872	0.45	45%	0.12	0.15	26%	-0.10	29%	-0.19	7%
14	64104009-MC	880	0.76	76%	0.38	0.53	10%	-0.18	14%	-0.44	6%
15	64104001-MC	873	0.66	66%	0.56	0.72	15%	-0.42	19%	-0.40	7%

Performance Tasks

Item	Item ID	N	Score 0		Score 1		Score 2		Score 3		Score 4	
			%	r_{pb}								
16	64094101-PT	936	12%	-0.71	13%	-0.25	10%	-0.07	13%	0.09	52%	0.61
17	64094102-PT	936	13%	-0.70	15%	-0.27	12%	-0.01	15%	0.13	44%	0.59
18	64094103-PT	936	12%	-0.73	11%	-0.27	9%	-0.06	14%	0.10	54%	0.61
19	64104106-PT	936	13%	-0.72	17%	-0.21	15%	0.05	23%	0.28	32%	0.39
20	64104107-PT	936	14%	-0.73	17%	-0.23	14%	0.02	21%	0.23	35%	0.50
21	64104101-PT	936	15%	-0.68	19%	-0.18	17%	0.05	17%	0.22	32%	0.45
22	64104102-PT	936	13%	-0.74	11%	-0.25	12%	-0.08	17%	0.13	47%	0.61
23	64104103-PT	936	13%	-0.73	12%	-0.25	14%	0.01	21%	0.21	39%	0.50
24	64104104-PT	936	15%	-0.69	17%	-0.20	15%	0.04	19%	0.22	34%	0.47
25	64104105-PT	936	13%	-0.76	9%	-0.27	7%	-0.09	10%	0.03	61%	0.71
26	64114101-PT	936	13%	-0.74	10%	-0.23	10%	-0.08	14%	0.08	55%	0.62
27	64114102-PT	936	12%	-0.73	12%	-0.26	12%	-0.04	20%	0.14	45%	0.56
28	64114103-PT	936	14%	-0.72	13%	-0.26	10%	0.01	16%	0.13	47%	0.58
29	64114104-PT	936	11%	-0.74	7%	-0.28	7%	-0.09	12%	-0.01	63%	0.69
30	64114105-PT	936	11%	-0.73	12%	-0.25	10%	-0.06	17%	0.12	49%	0.57

Table 6.3.16
2012 AIMS A Classical Item Analysis
Science Grade 8
Multiple Choice

Item	Item ID	N	P-Value	%	Correct		Distractor 1		Distractor 2		% Omit
					r_{pb}	r_{bi}	%	r_{pb}	%	r_{pb}	
1	64098010-MC	862	0.65	65%	0.47	0.60	18%	-0.29	17%	-0.42	6%
2	64098015-MC	858	0.76	76%	0.44	0.61	17%	-0.43	7%	-0.25	6%
3	64098017-MC	859	0.59	59%	0.49	0.62	14%	-0.27	27%	-0.44	6%
4	64098019-MC	854	0.62	62%	0.41	0.53	10%	-0.21	28%	-0.42	6%
5	64108006-MC	851	0.42	42%	0.21	0.27	24%	-0.08	34%	-0.28	7%
6	64108008-MC	847	0.58	58%	0.45	0.56	24%	-0.29	18%	-0.38	7%
7	64098009-MC	855	0.59	59%	0.58	0.73	18%	-0.34	22%	-0.47	6%
8	64098028-MC	846	0.60	60%	0.46	0.59	14%	-0.31	26%	-0.38	7%
9	64108001-MC	851	0.58	58%	0.35	0.44	22%	-0.19	20%	-0.38	7%
10	64108002-MC	854	0.73	73%	0.42	0.57	10%	-0.26	17%	-0.40	6%
11	64098027-MC	848	0.78	78%	0.41	0.57	8%	-0.30	14%	-0.36	7%
12	64118001-MC	852	0.67	67%	0.51	0.67	15%	-0.35	18%	-0.41	7%
13	64108005-MC	853	0.68	68%	0.35	0.45	15%	-0.20	17%	-0.37	7%
14	64128003-MC	846	0.45	45%	0.34	0.43	25%	-0.23	30%	-0.27	7%
15	64118004-MC	850	0.63	63%	0.50	0.63	17%	-0.25	21%	-0.47	7%

Performance Tasks

Item	Item ID	N	Score 0		Score 1		Score 2		Score 3		Score 4	
			%	r_{pb}								
16	64098101-PT	913	8%	-0.63	6%	-0.37	6%	-0.22	8%	-0.08	72%	0.74
17	64108106-PT	913	10%	-0.66	13%	-0.34	14%	-0.01	23%	0.17	41%	0.49
18	64098103-PT	913	13%	-0.69	10%	-0.31	10%	-0.08	14%	0.09	52%	0.64
19	64098104-PT	913	9%	-0.70	7%	-0.36	5%	-0.13	9%	-0.08	70%	0.75
20	64098105-PT	913	9%	-0.69	9%	-0.36	8%	-0.15	10%	-0.02	64%	0.73
21	64108101-PT	913	14%	-0.64	17%	-0.24	22%	0.13	24%	0.27	23%	0.33
22	64108102-PT	913	13%	-0.70	13%	-0.25	18%	0.02	22%	0.22	33%	0.47
23	64108105-PT	913	12%	-0.71	9%	-0.32	7%	-0.04	17%	0.06	55%	0.63
24	64118101-PT	913	9%	-0.69	8%	-0.33	8%	-0.16	11%	-0.05	65%	0.71
25	64118102-PT	913	10%	-0.69	11%	-0.33	10%	-0.11	14%	0.07	55%	0.64
26	64118103-PT	913	19%	-0.62	25%	-0.12	20%	0.20	19%	0.27	17%	0.29
27	64118104-PT	913	11%	-0.70	10%	-0.33	8%	-0.09	16%	0.08	56%	0.62
28	64118105-PT	913	12%	-0.71	12%	-0.34	8%	-0.05	12%	0.07	56%	0.67
29	64128103-PT	913	15%	-0.70	15%	-0.25	16%	0.03	18%	0.21	36%	0.52
30	64128104-PT	913	12%	-0.71	14%	-0.30	16%	0.00	17%	0.17	41%	0.57

Table 6.3.17
2012 AIMS A Classical Item Analysis
Science Grade 10
Multiple Choice

Item	Item ID	N	P-Value	%	Correct		Distractor 1		Distractor 2		% Omit
					r_{pb}	r_{bi}	%	r_{pb}	%	r_{pb}	
1	64090006-MC	815	0.87	87%	0.46	0.73	6%	-0.28	7%	-0.44	5%
2	64090007-MC	804	0.55	55%	0.30	0.37	29%	-0.18	16%	-0.34	6%
3	64090002-MC	811	0.60	60%	0.38	0.49	11%	-0.31	29%	-0.32	5%
4	64090015-MC	799	0.72	72%	0.47	0.63	10%	-0.27	18%	-0.45	7%
5	64090017-MC	802	0.66	66%	0.50	0.65	18%	-0.27	16%	-0.49	6%
6	64090018-MC	805	0.46	46%	0.23	0.28	21%	-0.29	32%	-0.13	6%
7	64090020-MC	812	0.80	80%	0.47	0.66	9%	-0.26	11%	-0.46	5%
8	64090023-MC	802	0.77	77%	0.60	0.84	11%	-0.41	12%	-0.48	6%
9	64090027-MC	811	0.71	71%	0.37	0.49	12%	-0.31	17%	-0.30	5%
10	64100008-MC	801	0.71	71%	0.47	0.62	10%	-0.45	19%	-0.31	6%
11	64090009-MC	804	0.71	71%	0.46	0.61	11%	-0.29	18%	-0.42	6%
12	64100001-MC	804	0.49	49%	0.19	0.24	27%	-0.37	24%	0.01	6%
13	64110001-MC	806	0.73	73%	0.53	0.71	15%	-0.38	12%	-0.42	6%
14	64110002-MC	807	0.72	72%	0.58	0.77	15%	-0.49	13%	-0.36	6%
15	64110005-MC	806	0.75	75%	0.36	0.49	10%	-0.19	15%	-0.40	6%

Performance Tasks

Item	Item ID	N	Score 0		Score 1		Score 2		Score 3		Score 4	
			%	r_{pb}								
16	64090101-PT	855	11%	-0.69	10%	-0.35	6%	-0.13	9%	0.00	65%	0.73
17	64090102-PT	855	10%	-0.67	7%	-0.37	5%	-0.23	7%	-0.01	71%	0.77
18	64090103-PT	855	21%	-0.74	11%	-0.19	10%	0.04	17%	0.19	41%	0.57
19	64090104-PT	855	13%	-0.71	11%	-0.29	11%	-0.01	18%	0.15	46%	0.56
20	64090105-PT	855	13%	-0.72	10%	-0.27	9%	-0.07	15%	0.11	53%	0.62
21	64100101-PT	855	12%	-0.72	9%	-0.32	7%	-0.11	13%	0.00	60%	0.72
22	64100102-PT	855	13%	-0.70	14%	-0.26	13%	-0.01	18%	0.14	43%	0.55
23	64100103-PT	855	12%	-0.73	10%	-0.31	7%	-0.09	14%	0.08	57%	0.66
24	64100104-PT	855	13%	-0.73	11%	-0.33	9%	-0.07	15%	0.10	52%	0.66
25	64100105-PT	855	13%	-0.77	9%	-0.30	8%	-0.09	15%	0.14	55%	0.63
26	64110101-PT	855	15%	-0.66	14%	-0.25	14%	0.08	25%	0.26	31%	0.39
27	64110102-PT	855	14%	-0.71	14%	-0.25	14%	0.03	18%	0.19	39%	0.51
28	64110103-PT	855	17%	-0.72	14%	-0.19	16%	0.11	21%	0.26	32%	0.42
29	64110104-PT	855	14%	-0.73	13%	-0.27	9%	-0.01	14%	0.11	50%	0.62
30	64110105-PT	855	15%	-0.76	12%	-0.27	7%	-0.02	10%	0.10	56%	0.68

Part 7: Calibration, Scaling, and Scoring

Part 7 of the Technical Report describes the scaling procedures and results for the 2012 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 conducted by two ADE staff members.

7.1.1 Calibration Models

The AIMS A Mathematics, Reading, and Science criterion-reference assessments are comprised of multiple-choice items, performance tasks and rater 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 item difficulty.

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 2007 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 of estimates for the Rasch difficulty measures indicated that the parameters were well estimated. Model to item data fit was monitored using weighted mean-square (MNSQ) and unweighted MNSQ statistics, which indicated the degree of accuracy and predictability with which the data fits the model (Linacre, 2002). In Winsteps and Rasch literature, weighted mean-square is also referred to as infit MNSQ and unweighted mean-square is referred to as outfit MNSQ. The weighted mean-square statistic is sensitive to unexpected

responses at or near the item's calibrated level, whereas unweighted mean-square statistics is sensitive to unexpected responses away from the item's calibrated level. Typically, values less than 0.6 and greater than 1.4 for weighted MNSQ indicate misfit, and values greater than 1.4 for unweighted MNSQ indicate misfit (Wright & Linacre, 1994). Thirteen items were flagged as having misfit as indicated by weighted MNSQ and 82 items were flagged as having misfit as indicated by unweighted MNSQ. Items on 17 of the 17 tests, with between three and eight items flagged per test, had misfit as indicated by unweighted MNSQ. 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 weighted and unweighted MNSQ along with low point biserials 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.MS	PT. BISE	P-VALUE	
1	Math	Grade 3	1	3.77			
2	Math	Grade 3	2	1.43			
3	Math	Grade 3	3	3.21			
4	Math	Grade 3	4	2.78			
5	Math	Grade 3	5	2.93			
6	Math	Grade 3	6	2.89			
7	Math	Grade 3	9	1.93	4.75	0.07	0.27
8	Math	Grade 3	10	1.43	1.92		
9	Math	Grade 3	11	1.57			
10	Math	Grade 3	12	1.62	5.62	0.26	
11	Math	Grade 3	13	1.58			
12	Math	Grade 3	15	1.52			
13	Math	Grade 3	18	0.59			
14	Math	Grade 3	19	0.58	0.56		
15	Math	Grade 3	21	0.59			
16	Math	Grade 3	24				0.29
17	Math	Grade 4	2	2.51	0.38		
18	Math	Grade 4	4				
19	Math	Grade 4	5	2.45	0.43		
20	Math	Grade 4	6				
21	Math	Grade 4	7	4.83	0.40		
22	Math	Grade 4	9	1.47	2.82		
23	Math	Grade 4	10	2.85			
24	Math	Grade 4	11	1.75			
25	Math	Grade 4	13	1.62	6.44		
26	Math	Grade 4	14	3.13			
27	Math	Grade 4	15	1.62	2.52		
28	Math	Grade 4	19	0.55	0.55		
29	Math	Grade 5	1	3.63			
30	Math	Grade 5	2	1.71			
31	Math	Grade 5	3	1.56			
32	Math	Grade 5	5	3.58			
33	Math	Grade 5	6	2.04			

34	Math	Grade 5	8		2.22	
35	Math	Grade 5	9		2.67	
36	Math	Grade 5	10		2.15	0.24
37	Math	Grade 5	11		6.65	0.25
38	Math	Grade 5	12		2.66	
39	Math	Grade 5	13		1.91	
40	Math	Grade 5	14	1.53	4.08	0.13
41	Math	Grade 5	15		1.84	0.26
42	Math	Grade 6	1		1.89	
43	Math	Grade 6	4		2.71	0.21
44	Math	Grade 6	7		1.75	
45	Math	Grade 6	9		1.74	
46	Math	Grade 6	10		1.59	
47	Math	Grade 6	11	1.43	4.37	0.17
48	Math	Grade 6	12		2.12	
49	Math	Grade 6	13	1.44	3.99	0.12
50	Math	Grade 6	14		1.72	
51	Math	Grade 6	15		1.88	
52	Math	Grade 7	1		2.10	
53	Math	Grade 7	2	1.54	2.45	0.27
54	Math	Grade 7	3		2.26	
55	Math	Grade 7	4		1.93	
56	Math	Grade 7	5		2.55	
57	Math	Grade 7	7		1.75	
58	Math	Grade 7	10	1.56	5.77	0.27
59	Math	Grade 7	11	1.41	2.80	
60	Math	Grade 7	12		1.49	
61	Math	Grade 7	13		1.75	
62	Math	Grade 7	14		1.41	
63	Math	Grade 7	15		7.32	
64	Math	Grade 8	1		2.31	
65	Math	Grade 8	3		1.80	
66	Math	Grade 8	4		3.27	
67	Math	Grade 8	5		1.64	
68	Math	Grade 8	6	1.47	2.85	0.25
69	Math	Grade 8	7		1.77	
70	Math	Grade 8	8		3.68	
71	Math	Grade 8	10		3.23	
72	Math	Grade 8	11		1.43	
73	Math	Grade 8	12		9.9	
74	Math	Grade 8	13		1.64	
75	Math	Grade 8	14	1.47	1.80	0.24
76	Math	Grade 8	15	1.58	2.58	0.19
77	Math	Grade 10	1		1.96	
78	Math	Grade 10	2		2.58	
79	Math	Grade 10	4		2.29	
80	Math	Grade 10	5		1.60	
81	Math	Grade 10	7	1.59	9.33	0.12
82	Math	Grade 10	9		1.68	
83	Math	Grade 10	11	1.51	3.03	0.23

84	Math	Grade 10	12		3.41		
85	Math	Grade 10	13		2.61		
86	Math	Grade 10	14	1.64	2.78	0.11	
87	Math	Grade 10	15		1.91		
88	Math	Grade 10	23	0.58	0.59		
89	Math	Grade 10	24				0.29
90	Read	Grade 3	1		1.56		
91	Read	Grade 3	2		6.01	0.26	
92	Read	Grade 3	3		3.01		
93	Read	Grade 3	5		1.69		
94	Read	Grade 3	6		1.76		
95	Read	Grade 3	7		3.42		
96	Read	Grade 3	8		2.63		
97	Read	Grade 3	11		1.46		
98	Read	Grade 3	12		1.68		
99	Read	Grade 3	13		2.04		
100	Read	Grade 3	14		1.64		
101	Read	Grade 3	15		3.19		
102	Read	Grade 4	1		1.79		
103	Read	Grade 4	3		2.94		
104	Read	Grade 4	5		1.77		
105	Read	Grade 4	6		1.66		
106	Read	Grade 4	7	1.51	2.80		
107	Read	Grade 4	8		6.19		
108	Read	Grade 4	9	1.42	9.90		
109	Read	Grade 4	10	1.47	2.45		
110	Read	Grade 4	11		4.59		
111	Read	Grade 4	12		2.88		
112	Read	Grade 4	14		2.11		
113	Read	Grade 4	15	1.44	9.90	0.27	
114	Read	Grade 5	1		2.91		
115	Read	Grade 5	2		1.56		
116	Read	Grade 5	3		2.21		
117	Read	Grade 5	4		2.15		
118	Read	Grade 5	5	1.48	4.40		
119	Read	Grade 5	7		2.15		
120	Read	Grade 5	8		1.60		
121	Read	Grade 5	9		1.73		
122	Read	Grade 5	10	1.41	4.85		
123	Read	Grade 5	12		1.49		
124	Read	Grade 5	13		1.47		
125	Read	Grade 5	14		2.21		
126	Read	Grade 5	15	1.43	2.65		
127	Read	Grade 6	1		4.33		
128	Read	Grade 6	3		4.45		
129	Read	Grade 6	4		2.31		
130	Read	Grade 6	5	1.49	1.91		
131	Read	Grade 6	7		1.92		
132	Read	Grade 6	9		3.31		
133	Read	Grade 6	10		1.49		

134	Read	Grade 6	12		1.49		
135	Read	Grade 6	13		1.86		
136	Read	Grade 6	14		4.88		
137	Read	Grade 6	15	1.81	4.83	0.23	
138	Read	Grade 6	24		0.54		
139	Read	Grade 6	27		0.59		
140	Read	Grade 6	29		0.59		
141	Read	Grade 7	1	1.45	2.04		
142	Read	Grade 7	2		9.53		
143	Read	Grade 7	3		1.46		
144	Read	Grade 7	5		7.97		
145	Read	Grade 7	7	2.09	7.62	0.16	0.30
146	Read	Grade 7	8		1.75		
147	Read	Grade 7	9	1.57	3.96		
148	Read	Grade 7	10		4.86		
149	Read	Grade 7	14	1.53	2.44		
150	Read	Grade 7	15		1.70		
151	Read	Grade 7	24		0.58		
152	Read	Grade 7	26		0.53		
153	Read	Grade 8	3		1.92		
154	Read	Grade 8	4		7.35		
155	Read	Grade 8	5	1.42	1.91		
156	Read	Grade 8	7		5.63		
157	Read	Grade 8	8		1.81		
158	Read	Grade 8	9		1.57		
159	Read	Grade 8	10		2.29		
160	Read	Grade 8	11	1.54	3.75		
161	Read	Grade 8	12	1.68	5.16	0.24	
162	Read	Grade 8	13		2.64		
163	Read	Grade 8	15		1.96		
164	Read	Grade 8	28		0.59		
165	Read	Grade 10	1	1.43	2.12		
166	Read	Grade 10	3	1.58	2.14		
167	Read	Grade 10	5	1.48	3.07		
168	Read	Grade 10	6	1.47	2.52		
169	Read	Grade 10	7	1.43	2.58		
170	Read	Grade 10	8		2.09		
171	Read	Grade 10	10	1.45	2.06		
172	Read	Grade 10	11	1.51	2.42		
173	Read	Grade 10	13	1.46	1.86		
174	Read	Grade 10	14	1.87	3.79		
175	Read	Grade 10	15	1.41	1.57		
176	Read	Grade 10	17		0.55		
177	Read	Grade 10	18		0.52		
178	Read	Grade 10	19		0.45		
179	Read	Grade 10	20		0.49		
180	Read	Grade 10	21		0.55		
181	Read	Grade 10	23		0.58		
182	Read	Grade 10	24		0.54		
183	Read	Grade 10	26		0.56		

184	Read	Grade 10	27		0.55	
185	Read	Grade 10	28		0.58	
186	Science	Grade 4	1	1.74	7.94	
187	Science	Grade 4	2		4.28	
188	Science	Grade 4	5	1.41	1.61	
189	Science	Grade 4	6		1.50	
190	Science	Grade 4	7		2.64	
191	Science	Grade 4	8	1.85	3.90	
192	Science	Grade 4	10		4.33	
193	Science	Grade 4	12		2.48	
194	Science	Grade 4	13	1.77	4.50	0.22
195	Science	Grade 4	14		3.39	
196	Science	Grade 4	27		0.59	
197	Science	Grade 8	1		5.96	
198	Science	Grade 8	2		1.85	
199	Science	Grade 8	3		9.90	
200	Science	Grade 8	4		1.72	
201	Science	Grade 8	5	1.73	3.26	0.28
202	Science	Grade 8	6		9.90	
203	Science	Grade 8	8		1.69	
204	Science	Grade 8	9	1.45	4.20	
205	Science	Grade 8	12		1.83	
206	Science	Grade 8	13		9.90	
207	Science	Grade 8	14	1.49	2.24	
208	Science	Grade 8	15		2.29	
209	Science	Grade 8	20		0.58	
210	Science	Grade 8	27		0.59	
211	Science	Grade 10	2	1.57	2.81	
212	Science	Grade 10	3		5.34	
213	Science	Grade 10	6	1.59	4.54	0.28
214	Science	Grade 10	9	1.51	4.44	
215	Science	Grade 10	11		1.43	
216	Science	Grade 10	12	1.71	2.67	0.29
217	Science	Grade 10	13		2.91	
218	Science	Grade 10	15	1.44	2.79	
219	Science	Grade 10	23		0.59	
220	Science	Grade 10	24		0.56	

Table 7.2.1.2
2012 AIMS A IRT Item Statistics
Mathematics Grade 3

Item	Rasch Measure	SE	IN.MSQ	OUT.MS	PT. BIASE.	P-VALUE
1	-0.0713	0.0221	1.21	3.77	0.48	0.66
2	0.0304	0.0213	1.30	1.43	0.46	0.58
3	0.0787	0.0211	1.25	3.21	0.45	0.60
4	-0.3250	0.0257	1.36	2.78	0.46	0.75
5	0.1846	0.0208	1.27	2.93	0.44	0.51
6	0.1720	0.0209	1.25	2.89	0.45	0.50
7	-0.3449	0.0261	1.02	0.90	0.58	0.77
8	-0.0103	0.0216	1.03	1.01	0.55	0.66
9	0.6057	0.0232	1.93	4.75	0.07	0.27
10	0.1898	0.0208	1.43	1.92	0.37	0.50
11	0.1445	0.0209	1.38	1.57	0.40	0.53
12	0.2750	0.0209	1.62	5.62	0.26	0.45
13	-0.0808	0.0222	1.20	1.58	0.50	0.66
14	-0.0420	0.0218	0.97	0.89	0.60	0.64
15	0.1637	0.0209	1.30	1.52	0.43	0.52
16	-0.6923	0.0327	1.03	0.77	0.71	0.78
17	0.1686	0.0259	0.78	0.75	0.68	0.49
18	0.2213	0.0260	0.60	0.59	0.78	0.47
19	0.3171	0.0263	0.58	0.56	0.76	0.43
20	0.1949	0.0260	0.74	0.70	0.70	0.48
21	0.4768	0.0272	0.63	0.59	0.73	0.37
22	0.3498	0.0265	0.68	0.65	0.71	0.42
23	0.5583	0.0278	0.82	0.82	0.58	0.34
24	0.7051	0.0292	0.77	0.76	0.56	0.29
25	-0.3689	0.0283	0.79	0.68	0.77	0.69
26	0.1437	0.0259	0.86	0.82	0.62	0.50
27	-0.1021	0.0264	0.72	0.66	0.79	0.59
28	0.1020	0.0259	0.73	0.69	0.72	0.51
29	0.1182	0.0259	0.79	0.81	0.65	0.51
30	0.1713	0.0260	0.69	0.70	0.66	0.49

Table 7.2.1.2
2012 AIMS A IRT Item Statistics
Mathematics Grade 4

Item	Rasch Measure	SE	IN.MSQ	OUT.MS	PT. BIASE.	P-VALUE
1	-0.1215	0.0235	1.02	0.96	0.61	0.69
2	0.2716	0.0214	1.47	2.51	0.38	0.48
3	-0.3083	0.0265	1.08	0.84	0.61	0.76
4	0.1820	0.0214	1.27	6.50	0.47	0.53
5	0.2113	0.0214	1.34	2.45	0.43	0.51
6	-0.1190	0.0235	1.17	1.63	0.53	0.69
7	-0.0726	0.0229	1.49	4.83	0.40	0.65
8	0.0163	0.0222	1.01	1.01	0.62	0.59
9	0.3267	0.0215	1.47	2.82	0.36	0.45
10	-0.0300	0.0225	0.98	2.85	0.61	0.67
11	0.1368	0.0215	1.10	1.75	0.54	0.62
12	-0.3610	0.0276	1.09	1.28	0.60	0.78
13	0.3634	0.0216	1.62	6.44	0.30	0.44
14	-0.0421	0.0226	1.18	3.13	0.53	0.66
15	0.2461	0.0214	1.62	2.52	0.33	0.49
16	-0.7746	0.0348	0.94	0.65	0.74	0.80
17	-0.7172	0.0337	0.91	0.71	0.72	0.79
18	0.0090	0.0266	0.68	0.65	0.74	0.55
19	0.2502	0.0267	0.55	0.55	0.77	0.46
20	0.3063	0.0269	0.64	0.61	0.74	0.44
21	-0.5509	0.0310	0.83	0.71	0.73	0.74
22	0.4399	0.0276	0.66	0.66	0.64	0.39
23	0.6182	0.0291	0.72	0.68	0.66	0.33
24	0.5839	0.0287	0.68	0.64	0.67	0.35
25	0.7141	0.0301	0.70	0.73	0.57	0.30
26	-0.1601	0.0272	0.83	0.82	0.68	0.62
27	0.0351	0.0265	0.92	0.89	0.66	0.54
28	-0.0314	0.0267	0.90	0.84	0.69	0.57
29	-0.3560	0.0286	0.79	0.92	0.63	0.68
30	-0.6472	0.0325	0.84	0.70	0.73	0.77

Table 7.2.1.4
2012 AIMS A IRT Item Statistics
Mathematics Grade 5

Item	Rasch Measure	SE	IN.MSQ	OUT.MS	PT. BIASE.	P-VALUE
1	0.0386	0.0205	1.23	3.63	0.40	0.56
2	-0.3393	0.0255	1.32	1.71	0.50	0.74
3	-0.2467	0.0237	1.37	1.56	0.46	0.70
4	-0.2093	0.0231	0.99	0.97	0.58	0.71
5	0.0815	0.0203	1.21	3.58	0.40	0.54
6	0.2404	0.0201	1.24	2.04	0.32	0.42
7	-0.2571	0.0239	1.24	1.29	0.54	0.69
8	0.3399	0.0204	1.34	2.22	0.31	0.43
9	0.2288	0.0200	1.23	2.67	0.34	0.43
10	0.3835	0.0207	1.37	2.15	0.24	0.36
11	0.2416	0.0201	1.35	6.65	0.25	0.42
12	0.0580	0.0204	1.24	2.66	0.40	0.51
13	0.1925	0.0200	1.22	1.91	0.37	0.50
14	0.3613	0.0205	1.53	4.08	0.13	0.35
15	0.2658	0.0201	1.36	1.84	0.26	0.41
16	-0.1122	0.0261	0.73	0.70	0.74	0.57
17	0.0481	0.0257	0.73	0.72	0.68	0.51
18	-0.0912	0.0260	0.75	0.74	0.63	0.56
19	0.0540	0.0257	0.83	0.82	0.56	0.50
20	0.3752	0.0266	0.72	0.69	0.59	0.37
21	-0.4426	0.0288	0.75	0.68	0.76	0.69
22	-0.5340	0.0300	0.82	0.71	0.75	0.72
23	0.5033	0.0276	0.72	0.71	0.56	0.33
24	-0.4278	0.0286	0.80	0.74	0.71	0.69
25	-0.2053	0.0266	0.78	0.79	0.62	0.61
26	-0.0414	0.0258	0.78	0.77	0.61	0.54
27	-0.3399	0.0277	0.75	0.71	0.73	0.66
28	0.0593	0.0257	0.85	0.82	0.59	0.50
29	-0.5349	0.0300	0.87	0.76	0.73	0.72
30	-0.0973	0.0260	0.69	0.68	0.69	0.57

Table 7.2.1.5
2012 AIMS A IRT Item Statistics
Mathematics Grade 6

Item	Rasch Measure	SE	IN.MSQ	OUT.MS	PT. BIASE.	P-VALUE
1	0.1722	0.0191	1.16	1.89	0.40	0.51
2	0.1997	0.0190	1.11	1.24	0.42	0.49
3	-0.075	0.0211	1.15	1.28	0.47	0.69
4	0.3552	0.0191	1.40	2.71	0.21	0.38
5	-0.1505	0.0221	1.19	1.27	0.50	0.70
6	0.1059	0.0194	1.01	0.98	0.51	0.53
7	0.1038	0.0194	1.31	1.75	0.34	0.55
8	0.1896	0.0190	1.02	1.05	0.48	0.50
9	-0.2039	0.0230	1.01	1.74	0.54	0.75
10	0.2449	0.0189	1.27	1.59	0.32	0.46
11	0.316	0.0190	1.43	4.37	0.17	0.41
12	0.2672	0.0189	1.23	2.12	0.32	0.44
13	0.4161	0.0194	1.44	3.99	0.12	0.34
14	0.1192	0.0193	1.18	1.72	0.41	0.55
15	0.0554	0.0197	1.30	1.88	0.36	0.59
16	-0.5756	0.0298	0.74	0.65	0.78	0.75
17	-0.610	0.0304	0.83	0.76	0.70	0.76
18	-0.5095	0.0288	0.80	0.70	0.72	0.73
19	-0.4242	0.0277	0.79	0.75	0.74	0.70
20	-0.4280	0.0277	0.78	0.71	0.76	0.70
21	-0.3478	0.0268	0.78	0.74	0.70	0.68
22	-0.4280	0.0277	0.80	0.70	0.80	0.70
23	0.3933	0.0252	0.63	0.63	0.60	0.38
24	0.3431	0.0249	0.64	0.65	0.65	0.40
25	-0.2167	0.0256	0.79	0.76	0.69	0.63
26	0.1384	0.0243	0.75	0.74	0.57	0.48
27	0.1046	0.0243	0.78	0.75	0.60	0.50
28	0.3271	0.0248	0.86	0.84	0.47	0.41
29	-0.0068	0.0245	0.81	0.80	0.66	0.55
30	0.3743	0.0251	0.85	0.84	0.52	0.39

Table 7.2.1.6
2012 AIMS A IRT Item Statistics
Mathematics Grade 7

Item	Rasch Measure	SE	IN.MSQ	OUT.MS	PT. BIASE.	P-VALUE
1	0.1294	0.0209	1.30	2.10	0.41	0.58
2	0.3793	0.0209	1.54	2.45	0.27	0.42
3	0.1739	0.0207	1.19	2.26	0.46	0.54
4	0.2625	0.0206	1.31	1.93	0.40	0.49
5	0.3221	0.0207	1.34	2.55	0.37	0.48
6	0.1742	0.0207	1.05	1.24	0.54	0.55
7	0.1259	0.0209	1.17	1.75	0.47	0.61
8	0.1742	0.0207	1.15	1.20	0.49	0.55
9	-0.1545	0.0234	1.02	0.78	0.58	0.72
10	0.2693	0.0206	1.56	5.77	0.27	0.45
11	0.2458	0.0206	1.41	2.80	0.35	0.50
12	0.0573	0.0212	1.05	1.49	0.55	0.62
13	0.1153	0.0209	1.24	1.75	0.44	0.59
14	0.1691	0.0207	1.13	1.41	0.50	0.55
15	0.2118	0.0206	1.31	7.32	0.40	0.52
16	-0.5660	0.0311	0.76	0.64	0.72	0.76
17	-0.5825	0.0314	0.84	0.76	0.65	0.77
18	-0.5298	0.0306	0.80	0.68	0.70	0.75
19	-0.2073	0.0271	0.73	0.72	0.70	0.65
20	-0.4557	0.0296	0.79	0.67	0.75	0.73
21	0.6422	0.0285	0.70	0.70	0.60	0.33
22	0.4319	0.0269	0.71	0.68	0.66	0.40
23	0.3911	0.0267	0.68	0.66	0.67	0.42
24	0.5196	0.0274	0.71	0.68	0.66	0.37
25	0.2058	0.0261	0.75	0.73	0.73	0.49
26	-0.3168	0.0280	0.76	0.72	0.68	0.69
27	-0.2088	0.0272	0.78	0.74	0.67	0.65
28	-0.1114	0.0266	0.71	0.66	0.73	0.61
29	-0.4341	0.0293	0.85	0.77	0.68	0.72
30	-0.0513	0.0263	0.64	0.62	0.70	0.59

Table 7.2.1.7
2012 AIMS A IRT Item Statistics
Mathematics Grade 8

Item	Rasch Measure	SE	IN.MSQ	OUT.MS	PT. BIASE.	P-VALUE
1	0.1116	0.0206	1.28	2.31	0.39	0.53
2	-0.122	0.0225	0.97	0.87	0.57	0.69
3	0.1623	0.0205	1.23	1.80	0.41	0.52
4	0.1303	0.0206	1.31	3.27	0.36	0.54
5	0.1059	0.0206	1.28	1.64	0.39	0.54
6	0.3197	0.0206	1.47	2.85	0.25	0.42
7	0.2758	0.0205	1.39	1.77	0.30	0.45
8	0.0212	0.0211	0.97	3.68	0.55	0.63
9	-0.2515	0.0246	1.07	0.86	0.56	0.74
10	0.1512	0.0205	1.09	3.23	0.48	0.53
11	0.1493	0.0205	1.21	1.43	0.42	0.56
12	0.2637	0.0205	1.18	9.90	0.40	0.44
13	0.2055	0.0204	1.32	1.64	0.36	0.51
14	0.3469	0.0207	1.47	1.80	0.24	0.40
15	0.4310	0.0212	1.58	2.58	0.19	0.35
16	-0.5266	0.0305	0.75	0.66	0.72	0.73
17	-0.6335	0.0322	0.90	0.81	0.65	0.76
18	-0.5127	0.0303	0.82	0.72	0.72	0.73
19	-0.3220	0.0280	0.73	0.69	0.71	0.67
20	-0.5959	0.0316	0.87	0.72	0.72	0.75
21	0.4087	0.0270	0.74	0.70	0.65	0.38
22	0.3325	0.0266	0.68	0.66	0.71	0.41
23	0.4598	0.0274	0.66	0.64	0.67	0.37
24	0.5094	0.0278	0.67	0.63	0.66	0.35
25	0.3789	0.0269	0.75	0.70	0.69	0.40
26	-0.1436	0.0267	0.74	0.72	0.63	0.60
27	-0.1564	0.0267	0.71	0.68	0.69	0.61
28	0.1042	0.0260	0.79	0.82	0.58	0.50
29	-0.4086	0.0289	0.77	0.70	0.71	0.70
30	-0.3127	0.0279	0.78	0.71	0.69	0.67

Table 7.2.1.8
2012 AIMS A IRT Item Statistics
Mathematics High School

Item	Rasch Measure	SE	IN.MSQ	OUT.MS	PT. BIASE.	P-VALUE
1	0.1859	0.0193	1.38	1.96	0.35	0.54
2	0.0893	0.0196	1.26	2.58	0.41	0.56
3	-0.1048	0.0211	1.21	1.24	0.51	0.63
4	-0.0255	0.0204	1.13	2.29	0.51	0.63
5	0.1773	0.0194	1.24	1.60	0.41	0.51
6	0.1209	0.0195	1.09	1.40	0.50	0.54
7	0.4881	0.0203	1.59	9.33	0.12	0.31
8	-0.0869	0.0209	0.95	0.79	0.60	0.67
9	-0.2503	0.0231	1.19	1.68	0.48	0.75
10	0.0447	0.0199	1.15	1.22	0.47	0.60
11	0.3448	0.0195	1.51	3.03	0.23	0.40
12	0.2090	0.0193	1.30	3.41	0.38	0.51
13	0.1459	0.0194	1.30	2.61	0.39	0.51
14	0.4981	0.0204	1.64	2.78	0.11	0.31
15	0.2295	0.0193	1.34	1.91	0.35	0.47
16	-0.4791	0.0280	0.81	0.72	0.69	0.73
17	-0.2948	0.0260	0.69	0.63	0.76	0.67
18	-0.2031	0.0252	0.73	0.68	0.77	0.63
19	-0.6181	0.0301	0.89	0.76	0.68	0.77
20	-0.4435	0.0276	0.88	0.76	0.73	0.72
21	0.4088	0.0248	0.64	0.62	0.65	0.38
22	0.6032	0.0262	0.61	0.61	0.62	0.31
23	0.6032	0.0262	0.58	0.59	0.66	0.31
24	0.6745	0.0270	0.65	0.60	0.64	0.29
25	-0.0254	0.0243	0.73	0.70	0.70	0.56
26	0.0181	0.0242	0.76	0.74	0.67	0.55
27	0.2825	0.0242	0.77	0.75	0.64	0.44
28	0.0577	0.0241	0.69	0.67	0.75	0.53
29	0.1363	0.0240	0.80	0.77	0.70	0.50
30	0.3351	0.0244	0.76	0.74	0.62	0.41

Table 7.2.1.9
2012 AIMS A IRT Item Statistics
Reading Grade 3

Item	Rasch Measure	SE	IN.MSQ	OUT.MS	PT. BIASE.	P-VALUE
1	-0.2949	0.0249	1.21	1.56	0.53	0.76
2	0.3570	0.0206	1.29	6.01	0.26	0.32
3	0.3918	0.0208	1.29	3.01	0.31	0.36
4	-0.0199	0.0212	1.15	1.35	0.49	0.62
5	0.0232	0.0208	1.19	1.69	0.46	0.59
6	0.1059	0.0204	1.26	1.76	0.41	0.55
7	0.0402	0.0207	1.19	3.42	0.47	0.54
8	0.1517	0.0203	1.30	2.63	0.38	0.57
9	-0.0817	0.0218	1.01	0.90	0.57	0.65
10	0.1806	0.0202	1.18	1.25	0.44	0.49
11	0.0795	0.0205	1.20	1.46	0.45	0.58
12	0.1888	0.0202	1.30	1.68	0.38	0.49
13	0.2297	0.0202	1.26	2.04	0.38	0.46
14	0.2569	0.0203	1.20	1.64	0.41	0.45
15	0.0022	0.0210	1.19	3.19	0.47	0.60
16	-0.3679	0.0276	0.85	0.76	0.71	0.69
17	-0.5408	0.0298	0.81	0.67	0.75	0.74
18	0.4759	0.0264	0.71	0.69	0.57	0.35
19	0.1769	0.0250	0.66	0.64	0.62	0.47
20	0.0670	0.0249	0.71	0.68	0.65	0.52
21	-0.1335	0.0256	0.76	0.72	0.71	0.60
22	-0.3364	0.0272	0.75	0.73	0.70	0.68
23	-0.3925	0.0278	0.75	0.68	0.73	0.70
24	-0.4367	0.0284	0.78	0.71	0.71	0.71
25	0.0464	0.0250	0.81	0.78	0.62	0.52
26	-0.2741	0.0266	0.82	0.81	0.65	0.65
27	0.1055	0.0249	0.84	0.83	0.56	0.50
28	-0.2184	0.0262	0.78	0.76	0.68	0.63
29	-0.6644	0.0319	0.84	0.64	0.76	0.78
30	-0.5948	0.0307	0.82	0.66	0.77	0.76

Table 7.2.1.10
2012 AIMS A IRT Item Statistics
Reading Grade 4

Item	Rasch Measure	SE	IN.MSQ	OUT.MS	PT. BIASE.	P-VALUE
1	-0.2245	0.0277	1.12	1.79	0.61	0.79
2	0.0773	0.0225	1.06	1.04	0.59	0.64
3	0.1281	0.0220	1.12	2.94	0.53	0.63
4	0.1949	0.0214	1.02	1.30	0.57	0.60
5	0.1099	0.0221	1.23	1.77	0.52	0.61
6	0.0602	0.0227	1.28	1.66	0.52	0.61
7	0.0729	0.0225	1.51	2.8	0.37	0.66
8	0.2921	0.0209	1.34	6.19	0.39	0.57
9	0.4417	0.0207	1.42	9.90	0.32	0.44
10	0.1711	0.0216	1.47	2.45	0.35	0.67
11	0.3060	0.0208	1.39	4.59	0.36	0.53
12	0.4647	0.0208	1.20	2.88	0.41	0.43
13	0.0770	0.0225	0.99	0.93	0.61	0.66
14	0.4451	0.0207	1.31	2.11	0.37	0.44
15	0.5372	0.0210	1.44	9.90	0.27	0.38
16	0.0126	0.0270	0.77	0.79	0.63	0.60
17	-0.0690	0.0275	0.63	0.62	0.75	0.63
18	-0.0774	0.0276	0.66	0.64	0.75	0.63
19	-0.4334	0.0317	0.72	0.65	0.74	0.74
20	-0.2372	0.0291	0.71	0.65	0.79	0.69
21	-0.3626	0.0306	0.75	0.66	0.76	0.72
22	0.0745	0.0267	0.78	0.80	0.65	0.58
23	-0.3005	0.0298	0.78	0.72	0.76	0.71
24	-0.4334	0.0317	0.78	0.70	0.75	0.74
25	-0.3384	0.0303	0.79	0.71	0.74	0.72
26	-0.4618	0.0321	0.77	0.64	0.81	0.75
27	0.0703	0.0267	0.76	0.73	0.69	0.58
28	-0.0919	0.0277	0.70	0.67	0.76	0.64
29	-0.1229	0.0280	0.76	0.81	0.69	0.65
30	0.0206	0.0269	0.80	0.80	0.68	0.60

Table 7.2.1.11
2012 AIMS A IRT Item Statistics
Reading Grade 5

Item	Rasch Measure	SE	IN.MSQ	OUT.MS	PT. BIASE.	P-VALUE
1	-0.0792	0.0229	1.07	2.91	0.53	0.72
2	0.1125	0.0212	1.27	1.56	0.43	0.56
3	0.0486	0.0216	1.07	2.21	0.53	0.62
4	0.1290	0.0211	1.15	2.15	0.47	0.57
5	0.0339	0.0217	1.48	4.40	0.35	0.62
6	-0.0237	0.0223	1.15	1.34	0.53	0.64
7	0.2298	0.0209	1.35	2.15	0.37	0.53
8	0.0926	0.0213	1.11	1.60	0.50	0.64
9	0.0272	0.0218	1.16	1.73	0.51	0.60
10	-0.0985	0.0232	1.41	4.85	0.40	0.69
11	0.2297	0.0209	1.11	1.26	0.48	0.50
12	0.1204	0.0212	1.24	1.49	0.44	0.57
13	0.0072	0.0220	1.18	1.47	0.49	0.64
14	0.1257	0.0212	1.14	2.21	0.48	0.57
15	0.1952	0.0209	1.43	2.65	0.34	0.45
16	-0.5101	0.0319	0.82	0.73	0.73	0.75
17	-0.4234	0.0306	0.78	0.68	0.75	0.73
18	-0.1836	0.0278	0.73	0.70	0.70	0.65
19	-0.5060	0.0318	0.80	0.69	0.75	0.75
20	-0.5677	0.0329	0.82	0.67	0.78	0.76
21	-0.3449	0.0295	0.79	0.74	0.72	0.70
22	-0.1560	0.0276	0.80	0.84	0.62	0.64
23	-0.2189	0.0281	0.75	0.82	0.62	0.66
24	-0.5296	0.0322	0.77	0.68	0.75	0.75
25	-0.0302	0.0267	0.66	0.66	0.68	0.59
26	-0.3021	0.0290	0.72	0.65	0.75	0.69
27	-0.1304	0.0274	0.70	0.70	0.70	0.63
28	-0.230	0.0282	0.70	0.66	0.76	0.66
29	-0.0757	0.0270	0.76	0.74	0.67	0.61
30	-0.3985	0.0302	0.86	0.75	0.75	0.72

Table 7.2.1.12
2012 AIMS A IRT Item Statistics
Reading Grade 6

Item	Rasch Measure	SE	IN.MSQ	OUT.MS	PT. BIASE.	P-VALUE
1	-0.2005	0.0248	1.35	4.33	0.56	0.71
2	-0.0818	0.0233	1.15	1.05	0.57	0.71
3	0.0515	0.0222	1.32	4.45	0.50	0.66
4	-0.0330	0.0228	1.27	2.31	0.53	0.67
5	0.0024	0.0225	1.49	1.91	0.45	0.65
6	-0.1083	0.0236	1.19	1.36	0.58	0.70
7	0.0201	0.0224	1.24	1.92	0.54	0.64
8	-0.1751	0.0244	1.04	0.95	0.64	0.73
9	0.3257	0.0213	1.32	3.31	0.43	0.48
10	-0.1667	0.0243	1.22	1.49	0.57	0.73
11	-0.0742	0.0232	0.99	1.06	0.64	0.69
12	-0.0330	0.0228	1.30	1.49	0.53	0.67
13	0.0335	0.0223	1.34	1.86	0.51	0.62
14	0.1099	0.0218	1.25	4.88	0.52	0.59
15	0.5137	0.0218	1.81	4.83	0.23	0.38
16	0.1410	0.0259	0.73	0.72	0.67	0.54
17	-0.3739	0.0292	0.73	0.65	0.75	0.72
18	-0.3351	0.0288	0.73	0.66	0.75	0.70
19	-0.4156	0.0297	0.71	0.66	0.75	0.73
20	-0.2623	0.0281	0.77	0.83	0.67	0.68
21	-0.0366	0.0265	0.82	0.94	0.62	0.61
22	-0.3178	0.0286	0.72	0.67	0.75	0.70
23	-0.2380	0.0279	0.77	0.77	0.70	0.67
24	-0.4183	0.0298	0.65	0.54	0.83	0.73
25	-0.2694	0.0282	0.76	0.72	0.73	0.68
26	-0.4353	0.0300	0.77	0.64	0.80	0.73
27	-0.4507	0.0302	0.73	0.59	0.82	0.74
28	-0.3359	0.0288	0.70	0.62	0.79	0.70
29	-0.5163	0.0311	0.74	0.59	0.81	0.75
30	-0.4783	0.0306	0.75	0.60	0.81	0.74

Table 7.2.1.13
2012 AIMS A IRT Item Statistics
Reading Grade 7

Item	Rasch Measure	SE	IN.MSQ	OUT.MS	PT. BIASE.	P-VALUE
1	-0.1656	0.0259	1.45	2.04	0.54	0.71
2	0.1951	0.0228	1.26	9.53	0.53	0.54
3	0.1457	0.0230	1.24	1.46	0.55	0.59
4	-0.1004	0.0251	1.20	1.23	0.59	0.72
5	0.2995	0.0225	1.20	7.97	0.51	0.54
6	-0.1621	0.0259	1.04	0.83	0.65	0.74
7	0.7399	0.0240	2.09	7.62	0.16	0.30
8	0.0338	0.0238	1.26	1.75	0.55	0.66
9	0.2266	0.0227	1.57	3.96	0.40	0.56
10	-0.0449	0.0245	1.29	4.86	0.52	0.74
11	-0.1383	0.0256	1.20	0.93	0.60	0.73
12	0.0107	0.0240	1.22	1.19	0.57	0.68
13	-0.3134	0.0284	1.29	0.97	0.62	0.77
14	0.0514	0.0236	1.53	2.44	0.45	0.65
15	-0.3176	0.0285	1.04	1.70	0.65	0.80
16	-0.2529	0.0294	0.72	0.65	0.77	0.69
17	-0.1961	0.0289	0.70	0.65	0.77	0.67
18	-0.5346	0.0328	0.71	0.61	0.78	0.77
19	-0.5729	0.0334	0.74	0.61	0.78	0.78
20	-0.3715	0.0306	0.73	0.64	0.77	0.72
21	-0.0576	0.0279	0.68	0.72	0.69	0.62
22	-0.3182	0.0300	0.67	0.65	0.76	0.71
23	-0.3781	0.0307	0.68	0.64	0.79	0.73
24	-0.6674	0.0350	0.75	0.58	0.79	0.80
25	-0.4379	0.0314	0.75	0.66	0.77	0.74
26	-0.5585	0.0331	0.65	0.53	0.82	0.77
27	-0.2477	0.0293	0.73	0.70	0.72	0.69
28	-0.3705	0.0306	0.75	0.67	0.77	0.72
29	-0.4588	0.0317	0.76	0.69	0.77	0.75
30	-0.2746	0.0296	0.71	0.65	0.77	0.69

Table 7.2.1.14
2012 AIMS A IRT Item Statistics
Reading Grade 8

Item	Rasch Measure	SE	IN.MSQ	OUT.MS	PT. BIASE.	P-VALUE
1	0.3636	0.0219	1.10	1.09	0.54	0.52
2	-0.4565	0.0354	1.40	0.90	0.62	0.84
3	0.4056	0.0218	1.39	1.92	0.41	0.49
4	0.2862	0.0220	1.25	7.35	0.49	0.59
5	0.1526	0.0228	1.42	1.91	0.45	0.62
6	-0.3552	0.0321	1.20	1.15	0.60	0.83
7	0.1716	0.0226	1.35	5.63	0.50	0.54
8	0.1575	0.0227	1.25	1.81	0.51	0.63
9	0.1726	0.0226	1.21	1.57	0.52	0.64
10	0.2695	0.0221	1.21	2.29	0.49	0.61
11	0.3503	0.0219	1.54	3.75	0.36	0.52
12	0.7402	0.0238	1.68	5.16	0.24	0.31
13	0.3116	0.0219	1.24	2.64	0.48	0.58
14	-0.1193	0.0264	1.12	0.98	0.60	0.76
15	0.1471	0.0228	1.24	1.96	0.51	0.64
16	-0.1615	0.0293	0.75	0.68	0.77	0.68
17	-0.4824	0.0339	0.71	0.66	0.77	0.77
18	-0.3157	0.0312	0.77	0.68	0.75	0.73
19	-0.0861	0.0286	0.73	0.69	0.77	0.66
20	-0.3625	0.0319	0.82	0.83	0.74	0.74
21	-0.2522	0.0304	0.72	0.63	0.77	0.71
22	-0.0561	0.0283	0.74	0.70	0.73	0.65
23	-0.1216	0.0289	0.69	0.66	0.75	0.67
24	0.0494	0.0276	0.81	0.82	0.65	0.61
25	0.0210	0.0278	0.65	0.72	0.71	0.62
26	-0.3946	0.0324	0.73	0.62	0.78	0.75
27	-0.4212	0.0328	0.81	0.70	0.75	0.76
28	-0.3245	0.0313	0.68	0.59	0.79	0.73
29	-0.4608	0.0335	0.75	0.61	0.79	0.77
30	-0.2859	0.0308	0.76	0.70	0.74	0.72

Table 7.2.1.15
2012 AIMS A IRT Item Statistics
Reading High School

Item	Rasch Measure	SE	IN.MSQ	OUT.MS	PT. BIASE.	P-VALUE
1	-0.4810	0.0324	1.43	2.12	0.58	0.85
2	-0.1831	0.0264	1.09	1.30	0.63	0.79
3	0.1161	0.0233	1.58	2.14	0.49	0.65
4	0.0493	0.0238	1.10	1.26	0.64	0.68
5	0.0629	0.0237	1.48	3.07	0.52	0.67
6	-0.0396	0.0246	1.47	2.52	0.52	0.72
7	-0.0591	0.0248	1.43	2.58	0.53	0.73
8	-0.0717	0.0249	1.37	2.09	0.57	0.73
9	0.0766	0.0236	1.09	1.32	0.63	0.70
10	0.1690	0.0231	1.45	2.06	0.53	0.61
11	0.0195	0.0240	1.51	2.42	0.52	0.67
12	-0.2024	0.0267	1.21	1.37	0.61	0.78
13	0.3557	0.0225	1.46	1.86	0.50	0.54
14	0.3069	0.0226	1.87	3.79	0.36	0.56
15	-0.0371	0.0246	1.41	1.57	0.55	0.72
16	-0.1048	0.0277	0.67	0.70	0.79	0.68
17	-0.3896	0.0306	0.67	0.55	0.81	0.76
18	-0.3176	0.0297	0.60	0.52	0.84	0.74
19	-0.3673	0.0303	0.60	0.45	0.85	0.76
20	-0.4375	0.0313	0.66	0.49	0.83	0.78
21	-0.2992	0.0295	0.67	0.55	0.83	0.74
22	-0.0371	0.0272	0.63	0.65	0.81	0.66
23	-0.2066	0.0285	0.64	0.58	0.82	0.71
24	-0.2131	0.0286	0.61	0.54	0.84	0.71
25	-0.2496	0.0290	0.73	0.65	0.81	0.73
26	-0.0971	0.0276	0.63	0.56	0.82	0.68
27	-0.1178	0.0278	0.62	0.55	0.84	0.69
28	-0.0378	0.0272	0.62	0.58	0.81	0.66
29	0.2349	0.0261	0.74	0.79	0.71	0.57
30	0.3041	0.0260	0.76	0.78	0.71	0.54

Table 7.2.1.16
2012 AIMS A IRT Item Statistics
Science Grade 4

Item	Rasch Measure	SE	IN.MSQ	OUT.MS	PT. BIASE.	P-VALUE
1	0.1292	0.0236	1.74	7.94	0.35	0.67
2	0.1789	0.0232	1.06	4.28	0.61	0.65
3	-0.0395	0.0257	1.11	0.90	0.60	0.75
4	0.1187	0.0237	1.25	1.35	0.56	0.65
5	-0.1354	0.0274	1.41	1.61	0.54	0.77
6	0.4154	0.0219	1.24	1.50	0.51	0.52
7	-0.0375	0.0257	1.30	2.64	0.55	0.74
8	0.3552	0.0221	1.85	3.90	0.31	0.55
9	0.3009	0.0224	1.02	1.02	0.61	0.62
10	0.1285	0.0237	1.30	4.33	0.54	0.65
11	-0.0284	0.0256	1.00	0.93	0.65	0.74
12	0.0013	0.0251	1.11	2.48	0.60	0.74
13	0.5930	0.0219	1.77	4.50	0.22	0.42
14	0.0237	0.0248	1.30	3.39	0.53	0.72
15	0.2345	0.0228	1.00	0.99	0.62	0.62
16	-0.1902	0.0298	0.78	0.72	0.75	0.70
17	-0.0503	0.0285	0.74	0.70	0.75	0.66
18	-0.2587	0.0306	0.79	0.69	0.76	0.72
19	0.0838	0.0276	0.76	0.74	0.66	0.61
20	0.0624	0.0277	0.67	0.66	0.73	0.62
21	0.1684	0.0272	0.78	0.78	0.67	0.58
22	-0.1430	0.0293	0.66	0.60	0.80	0.69
23	-0.0438	0.0284	0.72	0.73	0.72	0.65
24	0.1125	0.0274	0.80	0.86	0.67	0.60
25	-0.3523	0.0319	0.80	0.66	0.81	0.75
26	-0.2662	0.0307	0.76	0.72	0.79	0.72
27	-0.1370	0.0293	0.64	0.59	0.78	0.68
28	-0.1132	0.0290	0.81	0.78	0.73	0.68
29	-0.4434	0.0333	0.80	0.65	0.79	0.77
30	-0.2063	0.030	0.72	0.67	0.76	0.71

Table 7.2.1.17
2012 AIMS A IRT Item Statistics
Science Grade 8

Item	Rasch Measure	SE	IN.MSQ	OUT.MS	PT. BIASE.	P-VALUE
1	0.3062	0.0230	1.29	5.96	0.51	0.61
2	0.0464	0.0261	1.33	1.85	0.58	0.71
3	0.4684	0.0222	1.15	9.90	0.53	0.56
4	0.3930	0.0224	1.31	1.72	0.49	0.58
5	0.7297	0.0224	1.73	3.26	0.28	0.39
6	0.4705	0.0222	1.29	9.90	0.49	0.54
7	0.5058	0.0221	0.96	0.94	0.62	0.55
8	0.4423	0.0222	1.19	1.69	0.53	0.56
9	0.4666	0.0222	1.45	4.20	0.42	0.54
10	0.1923	0.0240	1.19	1.17	0.57	0.68
11	0.0646	0.0258	1.25	1.04	0.58	0.73
12	0.3045	0.0203	1.12	1.83	0.58	0.63
13	0.2811	0.0232	1.36	9.90	0.48	0.64
14	0.6838	0.0223	1.49	2.24	0.38	0.42
15	0.3870	0.0225	1.19	2.29	0.54	0.59
16	-0.6564	0.0400	0.93	0.65	0.76	0.83
17	-0.0442	0.0297	0.72	0.70	0.69	0.68
18	-0.1418	0.0307	0.78	0.68	0.77	0.71
19	-0.5874	0.0384	0.88	0.62	0.77	0.81
20	-0.4267	0.0350	0.78	0.58	0.80	0.78
21	0.2834	0.0276	0.82	0.89	0.58	0.57
22	0.1158	0.0284	0.72	0.72	0.68	0.63
23	-0.0170	0.0294	0.70	0.69	0.75	0.67
24	-0.0826	0.0301	0.71	0.64	0.77	0.69
25	-0.2411	0.0320	0.82	0.74	0.75	0.74
26	-0.4553	0.0356	0.78	0.61	0.79	0.79
27	-0.2350	0.0319	0.70	0.59	0.79	0.73
28	-0.1948	0.0314	0.77	0.65	0.80	0.72
29	0.1559	0.0282	0.72	0.71	0.72	0.61
30	0.0367	0.0290	0.68	0.63	0.75	0.65

Table 7.2.1.18
2012 AIMS A IRT Item Statistics
Science Grade 10

Item	Rasch Measure	SE	IN.MSQ	OUT.MS	PT. BIASE.	P-VALUE
1	-0.3728	0.0331	1.20	0.96	0.62	0.83
2	0.2981	0.0229	1.57	2.81	0.37	0.51
3	0.2597	0.0231	1.36	5.34	0.46	0.57
4	0.0323	0.0252	1.21	1.13	0.58	0.67
5	0.1791	0.0236	1.17	1.30	0.55	0.62
6	0.4895	0.0225	1.59	4.54	0.28	0.44
7	-0.1661	0.0283	1.37	1.25	0.55	0.76
8	-0.0478	0.0263	0.97	0.66	0.67	0.73
9	-0.0235	0.0259	1.51	4.44	0.50	0.68
10	0.1889	0.0236	1.16	1.27	0.55	0.66
11	0.0829	0.0246	1.19	1.43	0.56	0.67
12	0.4531	0.0225	1.71	2.67	0.29	0.46
13	0.0143	0.0254	1.16	2.91	0.59	0.69
14	0.0372	0.0251	1.03	1.14	0.63	0.68
15	-0.0307	0.0260	1.44	2.79	0.49	0.71
16	-0.4635	0.0342	0.79	0.61	0.80	0.77
17	-0.6214	0.0374	0.85	0.6	0.80	0.81
18	0.0323	0.0281	0.69	0.67	0.78	0.61
19	-0.1598	0.0298	0.70	0.66	0.75	0.68
20	-0.2549	0.0310	0.71	0.67	0.78	0.71
21	-0.3805	0.0328	0.73	0.61	0.79	0.75
22	-0.0946	0.0292	0.68	0.64	0.74	0.66
23	-0.3374	0.0321	0.71	0.59	0.80	0.74
24	-0.2425	0.0308	0.63	0.56	0.81	0.71
25	-0.3109	0.0317	0.70	0.62	0.79	0.73
26	0.0433	0.0281	0.79	0.84	0.63	0.61
27	-0.0313	0.0286	0.72	0.69	0.70	0.64
28	0.0962	0.0277	0.75	0.77	0.68	0.59
29	-0.1572	0.0298	0.74	0.63	0.76	0.68
30	-0.2171	0.0305	0.79	0.68	0.78	0.70

7.3 Scaling Methods

A raw score to scale score table was determined for each of the Spring 2012 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:

$$M1 = \text{Desired SD} / \text{Logit SD}$$

$$M2 = \text{Desired Mean} / (\text{Logit Mean} * M1)$$

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 standard errors of measurement for all AIMS A tests.

Table 7.4.2
2012 AIMS A Raw Score to Scale Score
Mathematics Grade 3

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	1000	319	61	1261	8
1	1043	71	62	1262	8
2	1092	50	63	1263	8
3	1119	40	64	1264	8
4	1137	33	65	1265	8
5	1151	29	66	1266	8
6	1161	25	67	1267	8
7	1169	23	68	1268	8
8	1176	21	69	1269	8
9	1181	19	70	1270	8
10	1186	18	71	1271	8
11	1190	17	72	1272	8
12	1194	16	73	1273	8
13	1197	15	74	1274	8
14	1200	14	75	1275	9
15	1203	14	76	1276	9
16	1206	13	77	1277	9
17	1208	13	78	1278	9
18	1210	12	79	1279	9
19	1212	12	80	1280	9
20	1214	12	81	1281	9
21	1216	11	82	1282	9
22	1218	11	83	1283	9
23	1219	11	84	1285	9
24	1221	11	85	1286	9
25	1223	10	86	1287	9
26	1224	10	87	1288	9
27	1226	10	88	1290	10
28	1227	10	89	1291	10
29	1228	10	90	1292	10
30	1230	10	91	1294	10
31	1231	9	92	1295	10
32	1232	9	93	1296	10
33	1233	9	94	1298	10
34	1235	9	95	1299	11
35	1236	9	96	1301	11
36	1237	9	97	1303	11
37	1238	9	98	1305	11
38	1239	9	99	1306	12
39	1240	9	100	1308	12
40	1241	9	101	1310	12
41	1242	9	102	1312	12
42	1243	9	103	1315	13
43	1244	8	104	1317	13
44	1245	8	105	1320	14
45	1246	8	106	1322	14
46	1247	8	107	1325	15
47	1248	8	108	1328	15
48	1249	8	109	1332	16
49	1250	8	110	1336	17
50	1251	8	111	1340	18
51	1252	8	112	1345	19
52	1253	8	113	1350	21
53	1254	8	114	1357	23
54	1255	8	115	1365	25
55	1256	8	116	1375	29
56	1257	8	117	1389	34
57	1258	8	118	1410	44
58	1259	8	119	1450	66
59	1260	8	120	1500	318
60	1260	8			

Table 7.4.3
2012 AIMS A Raw Score to Scale Score
Mathematics Grade 4

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	1000	350	61	1260	9
1	1000	79	62	1261	9
2	1053	56	63	1262	9
3	1085	45	64	1263	9
4	1107	38	65	1264	9
5	1124	34	66	1265	9
6	1137	30	67	1266	9
7	1147	27	68	1268	9
8	1155	25	69	1269	9
9	1162	23	70	1270	9
10	1169	21	71	1271	9
11	1174	20	72	1272	9
12	1179	19	73	1273	9
13	1183	18	74	1274	9
14	1187	17	75	1275	9
15	1190	16	76	1276	9
16	1194	16	77	1277	9
17	1197	15	78	1279	10
18	1199	14	79	1280	10
19	1202	14	80	1281	10
20	1204	14	81	1282	10
21	1207	13	82	1283	10
22	1209	13	83	1285	10
23	1211	13	84	1286	10
24	1213	12	85	1287	10
25	1215	12	86	1288	10
26	1217	12	87	1290	10
27	1218	12	88	1291	10
28	1220	11	89	1293	11
29	1222	11	90	1294	11
30	1223	11	91	1296	11
31	1225	11	92	1297	11
32	1226	11	93	1299	11
33	1228	11	94	1300	11
34	1229	10	95	1302	12
35	1230	10	96	1304	12
36	1232	10	97	1306	12
37	1233	10	98	1307	12
38	1234	10	99	1309	13
39	1236	10	100	1312	13
40	1237	10	101	1314	13
41	1238	10	102	1316	14
42	1239	10	103	1318	14
43	1240	10	104	1321	14
44	1242	10	105	1324	15
45	1243	9	106	1327	15
46	1244	9	107	1330	16
47	1245	9	108	1333	17
48	1246	9	109	1337	18
49	1247	9	110	1341	18
50	1248	9	111	1346	20
51	1250	9	112	1351	21
52	1251	9	113	1357	22
53	1252	9	114	1364	24
54	1253	9	115	1372	27
55	1254	9	116	1383	31
56	1255	9	117	1397	36
57	1256	9	118	1418	46
58	1257	9	119	1459	70
59	1258	9	120	1500	347
60	1259	9			

Table 7.4.4
2012 AIMS A Raw Score to Scale Score
Mathematics Grade 5

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	1000	339	61	1260	9
1	1018	75	62	1261	9
2	1069	53	63	1262	9
3	1098	42	64	1263	9
4	1118	36	65	1264	9
5	1133	31	66	1265	9
6	1144	28	67	1266	9
7	1153	25	68	1267	9
8	1161	23	69	1268	9
9	1167	21	70	1269	9
10	1173	20	71	1270	9
11	1178	19	72	1271	9
12	1182	18	73	1272	9
13	1186	17	74	1273	9
14	1190	16	75	1274	9
15	1193	15	76	1275	9
16	1196	15	77	1276	9
17	1199	14	78	1277	9
18	1201	14	79	1278	9
19	1204	13	80	1279	9
20	1206	13	81	1280	9
21	1208	13	82	1281	9
22	1210	12	83	1282	9
23	1212	12	84	1283	9
24	1214	12	85	1285	9
25	1216	12	86	1286	9
26	1218	11	87	1287	9
27	1219	11	88	1288	10
28	1221	11	89	1289	10
29	1223	11	90	1291	10
30	1224	11	91	1292	10
31	1226	10	92	1293	10
32	1227	10	93	1295	10
33	1228	10	94	1296	10
34	1230	10	95	1297	11
35	1231	10	96	1299	11
36	1232	10	97	1300	11
37	1234	10	98	1302	11
38	1235	10	99	1304	11
39	1236	10	100	1305	12
40	1237	10	101	1307	12
41	1239	9	102	1309	12
42	1240	9	103	1311	13
43	1241	9	104	1313	13
44	1242	9	105	1316	13
45	1243	9	106	1318	14
46	1244	9	107	1321	15
47	1245	9	108	1324	15
48	1246	9	109	1327	16
49	1247	9	110	1331	17
50	1249	9	111	1335	18
51	1250	9	112	1339	19
52	1251	9	113	1345	21
53	1252	9	114	1351	23
54	1253	9	115	1359	26
55	1254	9	116	1370	30
56	1255	9	117	1384	36
57	1256	9	118	1406	47
58	1257	9	119	1449	71
59	1258	9	120	1500	338
60	1259	9			

Table 7.4.5
2012 AIMS A Raw Score to Scale Score
Mathematics Grade 6

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	1000	532	61	1256	13
1	1000	119	62	1258	13
2	1000	84	63	1259	13
3	1000	67	64	1261	13
4	1023	57	65	1262	13
5	1047	50	66	1264	13
6	1066	45	67	1265	13
7	1082	41	68	1267	13
8	1094	37	69	1268	13
9	1105	35	70	1270	13
10	1115	32	71	1271	13
11	1123	31	72	1273	13
12	1130	29	73	1274	14
13	1137	27	74	1276	14
14	1143	26	75	1277	14
15	1149	25	76	1279	14
16	1154	24	77	1281	14
17	1159	23	78	1282	14
18	1163	23	79	1284	14
19	1167	22	80	1285	14
20	1171	21	81	1287	14
21	1175	21	82	1289	14
22	1178	20	83	1290	14
23	1181	20	84	1292	14
24	1184	19	85	1294	15
25	1187	19	86	1296	15
26	1190	18	87	1298	15
27	1193	18	88	1299	15
28	1196	18	89	1301	15
29	1198	17	90	1303	15
30	1201	17	91	1305	15
31	1203	17	92	1307	16
32	1205	16	93	1309	16
33	1208	16	94	1312	16
34	1210	16	95	1314	16
35	1212	16	96	1316	17
36	1214	16	97	1319	17
37	1216	15	98	1321	17
38	1218	15	99	1324	18
39	1220	15	100	1326	18
40	1222	15	101	1329	19
41	1224	15	102	1332	19
42	1226	15	103	1335	20
43	1227	15	104	1339	20
44	1229	14	105	1342	21
45	1231	14	106	1346	22
46	1233	14	107	1350	23
47	1234	14	108	1355	24
48	1236	14	109	1360	25
49	1238	14	110	1366	26
50	1239	14	111	1372	28
51	1241	14	112	1379	30
52	1242	14	113	1387	33
53	1244	14	114	1397	36
54	1246	14	115	1409	40
55	1247	14	116	1425	46
56	1249	14	117	1446	56
57	1250	14	118	1480	72
58	1252	13	119	1500	109
59	1253	13	120	1500	530
60	1255	13			

Table 7.4.6
2012 AIMS A Raw Score to Scale Score
Mathematics Grade 7

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	1000	486	61	1266	12
1	1000	109	62	1267	12
2	1000	77	63	1269	12
3	1015	62	64	1270	12
4	1045	53	65	1271	12
5	1068	47	66	1273	12
6	1086	42	67	1274	12
7	1101	38	68	1275	12
8	1113	35	69	1277	12
9	1124	33	70	1278	12
10	1133	31	71	1279	12
11	1141	29	72	1281	12
12	1148	27	73	1282	12
13	1155	26	74	1283	12
14	1161	25	75	1285	12
15	1166	24	76	1286	12
16	1171	23	77	1288	12
17	1175	22	78	1289	13
18	1180	21	79	1291	13
19	1184	20	80	1292	13
20	1187	20	81	1294	13
21	1191	19	82	1295	13
22	1194	19	83	1297	13
23	1197	18	84	1298	13
24	1200	18	85	1300	13
25	1203	17	86	1301	13
26	1206	17	87	1303	14
27	1208	17	88	1305	14
28	1211	16	89	1307	14
29	1213	16	90	1308	14
30	1216	16	91	1310	14
31	1218	15	92	1312	14
32	1220	15	93	1314	15
33	1222	15	94	1316	15
34	1224	15	95	1318	15
35	1226	14	96	1320	16
36	1228	14	97	1323	16
37	1230	14	98	1325	16
38	1232	14	99	1327	17
39	1233	14	100	1330	17
40	1235	14	101	1333	17
41	1237	13	102	1336	18
42	1238	13	103	1339	18
43	1240	13	104	1342	19
44	1242	13	105	1345	20
45	1243	13	106	1349	21
46	1245	13	107	1353	21
47	1246	13	108	1358	22
48	1248	13	109	1362	24
49	1249	13	110	1368	25
50	1251	13	111	1374	26
51	1252	12	112	1381	28
52	1254	12	113	1389	31
53	1255	12	114	1398	34
54	1256	12	115	1410	37
55	1258	12	116	1424	43
56	1259	12	117	1444	51
57	1260	12	118	1474	65
58	1262	12	119	1500	98
59	1263	12	120	1500	483
60	1265	12			

Table 7.4.7
2012 AIMS A Raw Score to Scale Score
Mathematics Grade 8

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	1000	466	61	1263	12
1	1000	104	62	1265	12
2	1000	73	63	1266	12
3	1026	59	64	1267	12
4	1055	51	65	1268	12
5	1076	44	66	1270	12
6	1093	40	67	1271	12
7	1107	36	68	1272	12
8	1119	33	69	1274	12
9	1128	31	70	1275	12
10	1137	29	71	1276	12
11	1144	27	72	1278	12
12	1151	26	73	1279	12
13	1157	24	74	1281	12
14	1162	23	75	1282	12
15	1167	22	76	1283	12
16	1172	21	77	1285	12
17	1176	21	78	1286	12
18	1180	20	79	1288	12
19	1184	19	80	1289	12
20	1187	19	81	1290	12
21	1191	18	82	1292	12
22	1194	18	83	1293	13
23	1197	17	84	1295	13
24	1199	17	85	1297	13
25	1202	17	86	1298	13
26	1205	16	87	1300	13
27	1207	16	88	1301	13
28	1209	16	89	1303	13
29	1212	15	90	1305	14
30	1214	15	91	1307	14
31	1216	15	92	1308	14
32	1218	15	93	1310	14
33	1220	14	94	1312	14
34	1222	14	95	1314	15
35	1224	14	96	1316	15
36	1226	14	97	1319	15
37	1228	14	98	1321	16
38	1229	13	99	1323	16
39	1231	13	100	1326	16
40	1233	13	101	1328	17
41	1234	13	102	1331	17
42	1236	13	103	1334	18
43	1238	13	104	1337	18
44	1239	13	105	1340	19
45	1241	13	106	1344	20
46	1242	13	107	1348	20
47	1244	12	108	1352	21
48	1245	12	109	1356	22
49	1247	12	110	1362	24
50	1248	12	111	1367	25
51	1250	12	112	1374	27
52	1251	12	113	1381	29
53	1252	12	114	1390	32
54	1254	12	115	1401	36
55	1255	12	116	1415	41
56	1256	12	117	1435	49
57	1258	12	118	1464	63
58	1259	12	119	1500	95
59	1261	12	120	1500	464
60	1262	12			

Table 7.4.8
2012 AIMS A Raw Score to Scale Score
Mathematics High School

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	1000	508	61	1268	13
1	1000	112	62	1270	13
2	1000	78	63	1271	13
3	1039	62	64	1273	13
4	1067	52	65	1274	13
5	1088	45	66	1275	13
6	1104	40	67	1277	13
7	1117	36	68	1278	13
8	1128	33	69	1280	13
9	1137	31	70	1281	13
10	1145	29	71	1283	13
11	1151	27	72	1284	13
12	1158	26	73	1286	13
13	1163	25	74	1287	13
14	1168	23	75	1289	13
15	1173	22	76	1291	13
16	1177	22	77	1292	13
17	1181	21	78	1294	14
18	1185	20	79	1295	14
19	1188	20	80	1297	14
20	1192	19	81	1299	14
21	1195	19	82	1300	14
22	1198	18	83	1302	14
23	1200	18	84	1304	14
24	1203	17	85	1306	14
25	1206	17	86	1308	14
26	1208	17	87	1309	15
27	1211	16	88	1311	15
28	1213	16	89	1313	15
29	1215	16	90	1315	15
30	1217	16	91	1317	15
31	1219	15	92	1319	16
32	1221	15	93	1322	16
33	1223	15	94	1324	16
34	1225	15	95	1326	16
35	1227	15	96	1329	17
36	1229	14	97	1331	17
37	1231	14	98	1334	17
38	1233	14	99	1336	18
39	1234	14	100	1339	18
40	1236	14	101	1342	19
41	1238	14	102	1345	19
42	1239	14	103	1349	20
43	1241	14	104	1352	20
44	1243	14	105	1356	21
45	1244	13	106	1360	22
46	1246	13	107	1364	23
47	1247	13	108	1369	24
48	1249	13	109	1374	25
49	1250	13	110	1380	26
50	1252	13	111	1387	28
51	1254	13	112	1394	30
52	1255	13	113	1402	32
53	1256	13	114	1412	35
54	1258	13	115	1424	39
55	1259	13	116	1440	45
56	1261	13	117	1461	54
57	1262	13	118	1494	69
58	1264	13	119	1500	104
59	1265	13	120	1500	506
60	1267	13			

Table 7.4.9
2012 AIMS A Raw Score to Scale Score
Reading Grade 3

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	1000	430	61	1250	11
1	1000	96	62	1251	11
2	1011	67	63	1252	11
3	1048	53	64	1253	11
4	1073	45	65	1254	11
5	1091	39	66	1256	11
6	1105	35	67	1257	11
7	1116	32	68	1258	11
8	1126	29	69	1259	11
9	1134	27	70	1260	11
10	1141	25	71	1261	11
11	1147	24	72	1263	11
12	1153	22	73	1264	11
13	1157	21	74	1265	11
14	1162	20	75	1266	11
15	1166	20	76	1268	11
16	1170	19	77	1269	11
17	1174	18	78	1270	11
18	1177	18	79	1271	11
19	1180	17	80	1273	11
20	1183	17	81	1274	11
21	1186	16	82	1275	11
22	1188	16	83	1276	11
23	1191	15	84	1278	11
24	1193	15	85	1279	11
25	1196	15	86	1281	12
26	1198	14	87	1282	12
27	1200	14	88	1283	12
28	1202	14	89	1285	12
29	1204	14	90	1286	12
30	1206	13	91	1288	12
31	1208	13	92	1289	12
32	1210	13	93	1291	13
33	1211	13	94	1293	13
34	1213	13	95	1294	13
35	1215	13	96	1296	13
36	1216	12	97	1298	13
37	1218	12	98	1300	14
38	1220	12	99	1302	14
39	1221	12	100	1304	14
40	1223	12	101	1306	15
41	1224	12	102	1308	15
42	1225	12	103	1311	15
43	1227	12	104	1313	16
44	1228	12	105	1316	16
45	1230	11	106	1319	17
46	1231	11	107	1322	18
47	1232	11	108	1325	18
48	1234	11	109	1329	19
49	1235	11	110	1333	20
50	1236	11	111	1338	22
51	1237	11	112	1343	23
52	1239	11	113	1349	25
53	1240	11	114	1356	28
54	1241	11	115	1365	31
55	1242	11	116	1377	36
56	1244	11	117	1393	43
57	1245	11	118	1418	56
58	1246	11	119	1467	87
59	1247	11	120	1500	428
60	1248	11			

Table 7.4.10
2012 AIMS A Raw Score to Scale Score
Reading Grade 4

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	1000	486	61	1251	12
1	1000	109	62	1253	12
2	1000	76	63	1254	12
3	1004	62	64	1256	12
4	1034	53	65	1257	12
5	1056	46	66	1258	12
6	1074	42	67	1260	12
7	1088	38	68	1261	12
8	1100	35	69	1262	12
9	1111	32	70	1264	12
10	1119	30	71	1265	12
11	1127	28	72	1267	12
12	1134	27	73	1268	12
13	1141	25	74	1269	12
14	1146	24	75	1271	12
15	1151	23	76	1272	12
16	1156	22	77	1274	13
17	1161	22	78	1275	13
18	1165	21	79	1277	13
19	1169	20	80	1278	13
20	1172	20	81	1279	13
21	1176	19	82	1281	13
22	1179	19	83	1283	13
23	1182	18	84	1284	13
24	1185	18	85	1286	13
25	1188	17	86	1287	13
26	1190	17	87	1289	13
27	1193	17	88	1291	13
28	1195	16	89	1292	14
29	1198	16	90	1294	14
30	1200	16	91	1296	14
31	1202	15	92	1297	14
32	1204	15	93	1299	14
33	1207	15	94	1301	14
34	1209	15	95	1303	15
35	1211	15	96	1305	15
36	1212	14	97	1307	15
37	1214	14	98	1309	15
38	1216	14	99	1312	16
39	1218	14	100	1314	16
40	1220	14	101	1317	17
41	1221	14	102	1319	17
42	1223	13	103	1322	17
43	1225	13	104	1325	18
44	1226	13	105	1328	19
45	1228	13	106	1331	19
46	1230	13	107	1335	20
47	1231	13	108	1338	21
48	1233	13	109	1343	22
49	1234	13	110	1347	23
50	1236	13	111	1352	25
51	1237	13	112	1358	26
52	1239	13	113	1365	29
53	1240	13	114	1374	32
54	1242	12	115	1384	36
55	1243	12	116	1398	41
56	1244	12	117	1417	50
57	1246	12	118	1447	66
58	1247	12	119	1500	101
59	1249	12	120	1500	484
60	1250	12			

Table 7.4.11
2012 AIMS A Raw Score to Scale Score
Reading Grade 5

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	1000	588	61	1236	14
1	1000	129	62	1237	14
2	1000	89	63	1239	14
3	1000	71	64	1240	14
4	1000	60	65	1242	14
5	1016	52	66	1243	14
6	1035	47	67	1245	14
7	1050	43	68	1246	14
8	1063	39	69	1248	14
9	1074	37	70	1250	14
10	1084	34	71	1251	14
11	1092	33	72	1253	14
12	1100	31	73	1254	14
13	1107	30	74	1256	14
14	1113	28	75	1258	15
15	1119	27	76	1259	15
16	1125	26	77	1261	15
17	1130	25	78	1262	15
18	1134	25	79	1264	15
19	1139	24	80	1266	15
20	1143	23	81	1267	15
21	1147	23	82	1269	15
22	1151	22	83	1271	15
23	1154	22	84	1273	15
24	1158	21	85	1274	15
25	1161	21	86	1276	16
26	1164	20	87	1278	16
27	1167	20	88	1280	16
28	1170	19	89	1282	16
29	1173	19	90	1284	16
30	1176	19	91	1286	16
31	1178	18	92	1288	17
32	1181	18	93	1290	17
33	1183	18	94	1292	17
34	1186	18	95	1295	17
35	1188	17	96	1297	18
36	1190	17	97	1299	18
37	1193	17	98	1302	18
38	1195	17	99	1304	19
39	1197	17	100	1307	19
40	1199	16	101	1310	20
41	1201	16	102	1313	20
42	1203	16	103	1316	21
43	1205	16	104	1320	22
44	1207	16	105	1323	22
45	1209	16	106	1327	23
46	1210	16	107	1332	24
47	1212	15	108	1336	25
48	1214	15	109	1341	27
49	1216	15	110	1347	28
50	1217	15	111	1353	30
51	1219	15	112	1361	32
52	1221	15	113	1369	35
53	1223	15	114	1380	39
54	1224	15	115	1393	44
55	1226	15	116	1410	51
56	1228	15	117	1434	62
57	1229	15	118	1472	82
58	1231	15	119	1500	124
59	1232	14	120	1500	587
60	1234	14			

Table 7.4.12
2012 AIMS A Raw Score to Scale Score
Reading Grade 6

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	1000	621	61	1236	15
1	1000	137	62	1238	15
2	1000	95	63	1239	15
3	1000	76	64	1241	15
4	1000	64	65	1243	15
5	1008	56	66	1244	15
6	1029	50	67	1246	15
7	1045	46	68	1248	15
8	1059	42	69	1249	15
9	1071	39	70	1251	15
10	1081	36	71	1253	15
11	1090	34	72	1255	16
12	1098	32	73	1256	16
13	1105	31	74	1258	16
14	1111	30	75	1260	16
15	1118	28	76	1262	16
16	1123	27	77	1263	16
17	1128	26	78	1265	16
18	1133	25	79	1267	16
19	1138	25	80	1269	16
20	1142	24	81	1271	16
21	1146	23	82	1273	16
22	1150	23	83	1275	17
23	1153	22	84	1277	17
24	1157	22	85	1279	17
25	1160	21	86	1281	17
26	1163	21	87	1283	17
27	1166	20	88	1285	17
28	1169	20	89	1287	18
29	1172	20	90	1289	18
30	1174	19	91	1292	18
31	1177	19	92	1294	18
32	1180	19	93	1296	18
33	1182	18	94	1299	19
34	1185	18	95	1301	19
35	1187	18	96	1304	19
36	1189	18	97	1307	20
37	1191	18	98	1310	20
38	1194	17	99	1313	21
39	1196	17	100	1316	21
40	1198	17	101	1319	21
41	1200	17	102	1322	22
42	1202	17	103	1326	23
43	1204	17	104	1330	23
44	1206	16	105	1334	24
45	1208	16	106	1338	25
46	1210	16	107	1343	26
47	1211	16	108	1348	27
48	1213	16	109	1353	28
49	1215	16	110	1360	30
50	1217	16	111	1366	32
51	1219	16	112	1374	34
52	1221	16	113	1383	37
53	1222	16	114	1394	41
54	1224	16	115	1408	46
55	1226	15	116	1425	53
56	1227	15	117	1450	65
57	1229	15	118	1490	85
58	1231	15	119	1500	130
59	1233	15	120	1500	619
60	1234	15			

Table 7.4.13
2012 A AIMS A Raw Score to Scale Score
Reading Grade 7

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	1000	588	61	1236	15
1	1000	131	62	1238	15
2	1000	92	63	1239	15
3	1000	74	64	1241	15
4	1000	63	65	1243	15
5	1009	55	66	1244	15
6	1030	49	67	1246	15
7	1046	44	68	1248	15
8	1060	41	69	1249	15
9	1072	38	70	1251	15
10	1082	35	71	1253	15
11	1091	33	72	1255	15
12	1099	32	73	1256	15
13	1106	30	74	1258	15
14	1112	29	75	1260	15
15	1118	27	76	1262	15
16	1124	26	77	1263	15
17	1129	25	78	1265	15
18	1134	25	79	1267	16
19	1138	24	80	1269	16
20	1142	23	81	1271	16
21	1146	22	82	1273	16
22	1150	22	83	1275	16
23	1154	21	84	1276	16
24	1157	21	85	1278	16
25	1160	20	86	1281	16
26	1163	20	87	1283	17
27	1166	20	88	1285	17
28	1169	19	89	1287	17
29	1172	19	90	1289	17
30	1175	19	91	1291	17
31	1177	18	92	1294	18
32	1180	18	93	1296	18
33	1182	18	94	1298	18
34	1185	18	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	1196	17	100	1315	20
40	1198	16	101	1318	21
41	1200	16	102	1322	21
42	1202	16	103	1325	22
43	1204	16	104	1329	22
44	1206	16	105	1333	23
45	1208	16	106	1337	24
46	1209	16	107	1341	25
47	1211	16	108	1346	26
48	1213	16	109	1352	27
49	1215	15	110	1357	28
50	1217	15	111	1364	30
51	1219	15	112	1371	32
52	1220	15	113	1379	34
53	1222	15	114	1389	37
54	1224	15	115	1401	42
55	1226	15	116	1416	48
56	1227	15	117	1437	58
57	1229	15	118	1471	77
58	1231	15	119	1500	121
59	1232	15	120	1500	586
60	1234	15			

Table 7.4.14
2012 AIMS A Raw Score to Scale Score
Reading Grade 8

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	1000	447	61	1251	12
1	1000	99	62	1252	12
2	1000	69	63	1254	12
3	1035	55	64	1255	12
4	1061	47	65	1256	12
5	1080	41	66	1258	12
6	1095	36	67	1259	12
7	1106	33	68	1260	12
8	1116	30	69	1262	12
9	1125	28	70	1263	12
10	1132	26	71	1264	12
11	1139	25	72	1266	12
12	1144	23	73	1267	12
13	1150	22	74	1269	12
14	1154	21	75	1270	12
15	1159	20	76	1271	12
16	1163	20	77	1273	12
17	1166	19	78	1274	12
18	1170	18	79	1275	12
19	1173	18	80	1277	12
20	1176	17	81	1278	12
21	1179	17	82	1280	12
22	1182	17	83	1281	12
23	1185	16	84	1283	12
24	1187	16	85	1284	12
25	1190	16	86	1286	12
26	1192	15	87	1287	12
27	1195	15	88	1289	13
28	1197	15	89	1290	13
29	1199	15	90	1292	13
30	1201	14	91	1293	13
31	1203	14	92	1295	13
32	1205	14	93	1297	13
33	1207	14	94	1299	13
34	1209	14	95	1301	14
35	1211	14	96	1302	14
36	1213	13	97	1304	14
37	1215	13	98	1306	14
38	1216	13	99	1308	15
39	1218	13	100	1311	15
40	1220	13	101	1313	15
41	1221	13	102	1315	16
42	1223	13	103	1318	16
43	1225	13	104	1320	16
44	1226	13	105	1323	17
45	1228	13	106	1326	18
46	1229	12	107	1329	18
47	1231	12	108	1333	19
48	1233	12	109	1337	20
49	1234	12	110	1341	21
50	1236	12	111	1346	22
51	1237	12	112	1351	24
52	1238	12	113	1357	26
53	1240	12	114	1364	28
54	1241	12	115	1373	32
55	1243	12	116	1385	37
56	1244	12	117	1401	45
57	1246	12	118	1427	59
58	1247	12	119	1481	92
59	1248	12	120	1500	446
60	1250	12			

Table 7.4.15
2012 AIMS A Raw Score to Scale Score
Reading High School

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	1000	447	61	1248	11
1	1000	99	62	1249	11
2	1025	68	63	1251	11
3	1061	53	64	1252	11
4	1085	45	65	1253	11
5	1102	38	66	1254	11
6	1115	34	67	1255	11
7	1125	31	68	1257	11
8	1134	28	69	1258	11
9	1141	26	70	1259	11
10	1147	24	71	1260	11
11	1153	23	72	1261	11
12	1158	22	73	1263	11
13	1162	21	74	1264	11
14	1166	20	75	1265	11
15	1170	19	76	1266	11
16	1173	18	77	1268	11
17	1177	18	78	1269	11
18	1180	17	79	1270	11
19	1182	17	80	1271	11
20	1185	16	81	1273	12
21	1188	16	82	1274	12
22	1190	15	83	1276	12
23	1192	15	84	1277	12
24	1194	15	85	1278	12
25	1197	14	86	1280	12
26	1199	14	87	1281	12
27	1201	14	88	1283	12
28	1202	14	89	1284	12
29	1204	13	90	1286	13
30	1206	13	91	1287	13
31	1208	13	92	1289	13
32	1210	13	93	1291	13
33	1211	13	94	1292	13
34	1213	13	95	1294	13
35	1214	12	96	1296	14
36	1216	12	97	1298	14
37	1217	12	98	1300	14
38	1219	12	99	1302	15
39	1220	12	100	1304	15
40	1222	12	101	1306	15
41	1223	12	102	1309	16
42	1225	12	103	1311	16
43	1226	12	104	1314	17
44	1227	12	105	1317	17
45	1229	11	106	1320	18
46	1230	11	107	1323	18
47	1231	11	108	1327	19
48	1232	11	109	1331	20
49	1234	11	110	1335	21
50	1235	11	111	1340	23
51	1236	11	112	1345	24
52	1237	11	113	1352	26
53	1239	11	114	1359	29
54	1240	11	115	1369	33
55	1241	11	116	1381	38
56	1242	11	117	1398	45
57	1243	11	118	1425	59
58	1245	11	119	1478	91
59	1246	11	120	1500	445
60	1247	11			

Table 7.4.16
2012 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	100	62	1250	11
2	1000	70	63	1251	11
3	1032	57	64	1252	11
4	1059	48	65	1253	11
5	1079	42	66	1255	11
6	1095	38	67	1256	11
7	1108	34	68	1257	11
8	1119	31	69	1258	11
9	1128	29	70	1259	11
10	1135	27	71	1261	11
11	1142	25	72	1262	11
12	1148	24	73	1263	11
13	1154	23	74	1265	11
14	1159	22	75	1266	11
15	1163	21	76	1267	11
16	1167	20	77	1268	11
17	1171	19	78	1270	12
18	1174	18	79	1271	12
19	1178	18	80	1272	12
20	1181	17	81	1274	12
21	1184	17	82	1275	12
22	1186	16	83	1277	12
23	1189	16	84	1278	12
24	1191	16	85	1280	12
25	1194	15	86	1281	12
26	1196	15	87	1283	12
27	1198	15	88	1284	13
28	1200	14	89	1286	13
29	1202	14	90	1287	13
30	1204	14	91	1289	13
31	1206	14	92	1291	13
32	1208	13	93	1292	13
33	1210	13	94	1294	14
34	1211	13	95	1296	14
35	1213	13	96	1298	14
36	1215	13	97	1300	14
37	1216	13	98	1302	14
38	1218	12	99	1304	15
39	1219	12	100	1306	15
40	1221	12	101	1309	15
41	1222	12	102	1311	16
42	1224	12	103	1314	16
43	1225	12	104	1317	17
44	1227	12	105	1319	17
45	1228	12	106	1323	18
46	1229	12	107	1326	19
47	1231	12	108	1330	20
48	1232	12	109	1334	21
49	1233	11	110	1338	22
50	1235	11	111	1343	23
51	1236	11	112	1349	25
52	1237	11	113	1356	27
53	1238	11	114	1364	30
54	1240	11	115	1374	33
55	1241	11	116	1386	39
56	1242	11	117	1404	47
57	1243	11	118	1433	61
58	1245	11	119	1489	93
59	1246	11	120	1500	446
60	1247	11			

Table 7.4.17
2012 AIMS A Raw Score to Scale Score
Science Grade 8

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	1000	373	61	1254	10
1	1000	83	62	1255	10
2	1018	59	63	1257	10
3	1051	47	64	1258	10
4	1074	41	65	1259	10
5	1092	36	66	1260	10
6	1106	32	67	1261	10
7	1117	30	68	1262	10
8	1127	27	69	1263	10
9	1135	25	70	1264	10
10	1142	24	71	1265	10
11	1149	23	72	1266	10
12	1155	21	73	1267	10
13	1160	20	74	1269	10
14	1165	20	75	1270	10
15	1169	19	76	1271	10
16	1173	18	77	1272	10
17	1177	18	78	1273	10
18	1181	17	79	1274	10
19	1184	16	80	1275	10
20	1187	16	81	1276	10
21	1190	16	82	1278	10
22	1193	15	83	1279	10
23	1196	15	84	1280	10
24	1198	14	85	1281	10
25	1201	14	86	1282	10
26	1203	14	87	1284	10
27	1205	14	88	1285	10
28	1207	13	89	1286	10
29	1209	13	90	1287	11
30	1211	13	91	1289	11
31	1213	13	92	1290	11
32	1215	12	93	1292	11
33	1217	12	94	1293	11
34	1219	12	95	1294	11
35	1220	12	96	1296	11
36	1222	12	97	1298	12
37	1224	11	98	1299	12
38	1225	11	99	1301	12
39	1227	11	100	1303	12
40	1228	11	101	1305	13
41	1230	11	102	1306	13
42	1231	11	103	1308	13
43	1233	11	104	1311	14
44	1234	11	105	1313	14
45	1235	11	106	1315	14
46	1237	10	107	1318	15
47	1238	10	108	1321	16
48	1239	10	109	1324	16
49	1240	10	110	1327	17
50	1242	10	111	1331	18
51	1243	10	112	1335	20
52	1244	10	113	1340	21
53	1245	10	114	1346	23
54	1246	10	115	1354	26
55	1248	10	116	1363	30
56	1249	10	117	1377	37
57	1250	10	118	1398	49
58	1251	10	119	1442	76
59	1252	10	120	1500	371
60	1253	10			

Table 7.4.18
2012 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	1015	75	62	1247	8
2	1066	52	63	1247	8
3	1094	41	64	1248	8
4	1113	35	65	1249	8
5	1126	30	66	1250	8
6	1137	27	67	1251	8
7	1146	24	68	1252	8
8	1153	22	69	1253	8
9	1159	21	70	1254	8
10	1164	19	71	1255	8
11	1168	18	72	1256	8
12	1173	17	73	1257	9
13	1176	16	74	1258	9
14	1180	16	75	1259	9
15	1183	15	76	1260	9
16	1185	14	77	1261	9
17	1188	14	78	1262	9
18	1191	13	79	1263	9
19	1193	13	80	1264	9
20	1195	13	81	1265	9
21	1197	12	82	1266	9
22	1199	12	83	1267	9
23	1201	12	84	1268	9
24	1203	12	85	1269	9
25	1204	11	86	1270	9
26	1206	11	87	1271	9
27	1208	11	88	1272	9
28	1209	11	89	1274	9
29	1211	11	90	1275	10
30	1212	10	91	1276	10
31	1214	10	92	1277	10
32	1215	10	93	1278	10
33	1216	10	94	1280	10
34	1217	10	95	1281	10
35	1219	10	96	1283	10
36	1220	10	97	1284	11
37	1221	10	98	1285	11
38	1222	9	99	1287	11
39	1224	9	100	1289	11
40	1225	9	101	1290	11
41	1226	9	102	1292	12
42	1227	9	103	1294	12
43	1228	9	104	1296	12
44	1229	9	105	1298	13
45	1230	9	106	1300	13
46	1231	9	107	1303	14
47	1232	9	108	1305	14
48	1233	9	109	1308	15
49	1234	9	110	1311	16
50	1235	9	111	1315	17
51	1236	9	112	1319	18
52	1237	9	113	1323	19
53	1238	9	114	1329	21
54	1239	9	115	1335	24
55	1240	9	116	1344	28
56	1241	8	117	1356	34
57	1242	8	118	1376	44
58	1243	8	119	1416	69
59	1244	8	120	1500	337
60	1245	8			

Part 8: Test Results

8.1 Data

Part 8 of this Technical Report contains information about the results of the 2012 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, scale score means and standard deviations, as well as the percentages of students in each performance level, are presented for the state as a whole and disaggregated into various demographic groups. For these tables, to adhere to FERPA regulations, the results for aggregations with less than 11 students are masked. These values have been replaced with ‘*’.

In addition to the descriptive statistics presented in Tables 8.1.1.2 through 8.1.1.4, scale score frequency distributions are also presented in Tables 8.1.1.5 through 8.1.1.22. Each grade and content area is presented in a separate table. These tables show the raw score, scale score, frequency (FREQ), percent, and cumulative percentage (Cuml Pct).

Table 8.1.1.1
2012 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
4		1000	1500
5		1000	1500
6		1000	1500
7		1000	1500
8		1000	1500
HS		1000	1500
Science		4	1000
	8	1000	1500
	10	1000	1500

Table 8.1.1.2
2012 AIMS A State Test Results
Mathematics Grades 3-8 and High School

	N	Scale Score		% at Performance Level					
		M	SD	FFBS	AS	MS	ES	NR	INV
Grade 3									
Total	945	1259.34	59.86	12%	19%	49%	20%	2%	0%
Ethnic Background									
White	330	1267.26	51.41	8%	17%	51%	23%	1%	0%
Black	70	1255.40	57.12	11%	21%	56%	11%	3%	0%
Hispanic	435	1254.79	65.88	14%	19%	48%	20%	3%	0%
American Indian	69	1243.54	64.53	17%	23%	49%	10%	4%	0%
Asian	23	1271.22	38.68	9%	22%	35%	35%	0%	0%
Hawaiian Pacific Islander	4	*	*	*	*	*	*	*	*
Multiracial	14	1286.93	42.46	7%	21%	29%	43%	0%	0%
Other	0	*	*	*	*	*	*	*	*
Gender									
Male	640	1260.99	58.80	11%	18%	48%	23%	2%	0%
Female	305	1255.88	61.96	13%	19%	51%	16%	3%	0%
Need									
Autism	302	1263.90	46.15	7%	19%	57%	17%	1%	0%
DD	17	1291.41	38.53	0%	12%	47%	41%	0%	0%
ED	6	*	*	*	*	*	*	*	*
EDP	0	*	*	*	*	*	*	*	*
HI	4	*	*	*	*	*	*	*	*
MD	12	1246.50	80.51	8%	8%	75%	8%	0%	0%
MDSSI	54	1160.39	100.25	70%	17%	9%	4%	24%	0%
MIMR	290	1282.12	29.06	1%	10%	59%	30%	0%	0%
MOMR	126	1244.48	32.89	15%	40%	39%	6%	0%	0%
OHI	15	1306.73	52.24	0%	7%	40%	53%	0%	0%
OI	63	1228.00	82.35	22%	30%	37%	11%	6%	0%
SLD	32	1306.59	34.00	0%	0%	44%	56%	0%	0%
SLI	1	*	*	*	*	*	*	*	*
SMR	18	1173.44	98.48	61%	28%	11%	0%	17%	0%
VI	4	*	*	*	*	*	*	*	*
Other	1	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	574	1259.99	60.52	11%	19%	49%	21%	3%	0%
No Lunch Assistance	371	1258.33	58.88	13%	18%	49%	20%	2%	0%
Other	0	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	938	1259.28	60.03	12%	19%	49%	20%	2%	0%
Migrant	7	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
ELL									
Non-ELL	876	1258.43	59.69	12%	19%	50%	19%	2%	0%
ELL	69	1270.88	61.23	9%	9%	45%	38%	3%	0%
Other	0	*	*	*	*	*	*	*	*

Note: FFBS=Falls Far Below the Standard; AS=Approaches the Standard; MS=Meets the Standard; ES=Exceeds the Standard; *Masked values. 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. (Table continued.)

	N	Scale Score		% at Performance Level					
		M	SD	FFBS	AS	MS	ES	NR	INV
Grade 4									
Total	936	1266.29	72.53	11%	15%	51%	23%	3%	0%
Ethnic Background									
White	351	1266.67	74.47	11%	15%	49%	24%	3%	0%
Black	67	1272.21	46.87	9%	16%	58%	16%	0%	0%
Hispanic	418	1264.88	71.83	11%	14%	53%	22%	3%	0%
American Indian	63	1266.11	92.00	13%	8%	46%	33%	6%	0%
Asian	22	1262.55	70.63	5%	27%	50%	18%	5%	0%
Hawaiian Pacific Islander	3	*	*	*	*	*	*	*	*
Multiracial	12	1277.25	64.67	25%	17%	17%	42%	0%	0%
Other	0	*	*	*	*	*	*	*	*
Gender									
Male	599	1267.75	75.10	11%	15%	49%	25%	3%	0%
Female	337	1263.70	67.74	12%	14%	55%	20%	3%	0%
Need									
Autism	276	1270.23	55.59	9%	22%	44%	24%	1%	0%
DD	7	*	*	*	*	*	*	*	*
ED	8	*	*	*	*	*	*	*	*
EDP	1	*	*	*	*	*	*	*	*
HI	6	*	*	*	*	*	*	*	*
MD	21	1258.43	96.05	10%	19%	48%	24%	10%	0%
MDSSI	45	1167.73	110.00	53%	18%	29%	0%	20%	0%
MIMR	297	1295.36	40.59	0%	4%	63%	33%	0%	0%
MOMR	124	1250.64	45.19	12%	25%	57%	6%	0%	0%
OHI	21	1292.43	33.25	0%	10%	57%	33%	0%	0%
OI	62	1205.15	113.19	39%	11%	42%	8%	43%	0%
SLD	40	1317.73	55.57	0%	0%	53%	48%	0%	0%
SLI	4	*	*	*	*	*	*	*	*
SMR	19	1154.84	99.61	58%	37%	5%	0%	21%	0%
VI	3	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	587	1270.22	71.70	10%	13%	51%	25%	3%	0%
No Lunch Assistance	348	1259.66	73.64	14%	17%	50%	20%	3%	0%
Other	1	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	927	1266.35	72.28	11%	15%	51%	23%	3%	0%
Migrant	8	*	*	*	*	*	*	*	*
Other	1	*	*	*	*	*	*	*	*
ELL									
Non-ELL	891	1265.32	73.12	12%	15%	51%	23%	3%	0%
ELL	45	1285.62	56.98	4%	9%	51%	36%	2%	0%
Other	0	*	*	*	*	*	*	*	*

Note: FFBS=Falls Far Below the Standard; AS=Approaches the Standard; MS=Meets the Standard; ES=Exceeds the Standard; *Masked values. 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. (Table continued.)

	N	Scale Score		% at Performance Level					
		M	SD	FFBS	AS	MS	ES	NR	INV
Grade 5									
Total	916	1257.29	57.70	13%	15%	64%	9%	2%	0%
Ethnic Background									
White	361	1260.17	48.74	11%	17%	62%	10%	2%	0%
Black	74	1263.51	32.89	8%	18%	68%	7%	0%	0%
Hispanic	391	1253.90	66.02	15%	12%	64%	9%	3%	0%
American Indian	52	1259.23	60.05	10%	15%	63%	12%	4%	0%
Asian	23	1250.61	59.18	22%	0%	78%	0%	0%	0%
Hawaiian Pacific Islander	1	*	*	*	*	*	*	*	*
Multiracial	14	1248.79	103.25	29%	21%	43%	7%	7%	0%
Other	0	*	*	*	*	*	*	*	*
Gender									
Male	590	1262.35	51.62	11%	14%	64%	11%	1%	0%
Female	326	1248.13	66.42	15%	15%	64%	6%	4%	0%
Need									
Autism	238	1264.75	43.70	8%	21%	61%	11%	0%	0%
DD	0	*	*	*	*	*	*	*	*
ED	8	*	*	*	*	*	*	*	*
EDP	4	*	*	*	*	*	*	*	*
HI	6	*	*	*	*	*	*	*	*
MD	18	1243.78	71.80	17%	28%	44%	11%	6%	0%
MDSSI	59	1172.34	102.81	56%	19%	25%	0%	22%	0%
MIMR	307	1280.24	26.25	0%	5%	84%	11%	0%	0%
MOMR	119	1252.82	26.10	12%	28%	58%	3%	0%	0%
OHI	21	1282.95	17.92	0%	5%	81%	14%	0%	0%
OI	89	1226.35	78.26	37%	10%	49%	3%	6%	0%
SLD	17	1293.76	15.79	0%	0%	65%	35%	0%	0%
SLI	4	*	*	*	*	*	*	*	*
SMR	22	1198.64	63.86	50%	27%	23%	0%	0%	0%
VI	4	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	569	1262.53	55.65	11%	11%	68%	10%	2%	0%
No Lunch Assistance	346	1248.99	59.82	15%	20%	58%	7%	3%	0%
Other	1	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	911	1257.31	57.69	13%	15%	64%	9%	2%	0%
Migrant	4	*	*	*	*	*	*	*	*
Other	1	*	*	*	*	*	*	*	*
ELL									
Non-ELL	884	1256.78	58.55	13%	15%	63%	9%	2%	0%
ELL	32	1271.34	19.62	3%	6%	84%	6%	0%	0%
Other	0	*	*	*	*	*	*	*	*

Note: FFBS=Falls Far Below the Standard; AS=Approaches the Standard; MS=Meets the Standard; ES=Exceeds the Standard; *Masked values. 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. (Table continued.)

	N	Scale Score		% at Performance Level					
		M	SD	FFBS	AS	MS	ES	NR	INV
Grade 6									
Total	1000	1257.78	71.84	10%	20%	56%	14%	3%	0%
Ethnic Background									
White	390	1256.45	70.01	12%	20%	55%	13%	2%	1%
Black	68	1266.41	68.88	6%	12%	65%	18%	3%	1%
Hispanic	429	1260.09	70.48	9%	21%	56%	14%	2%	0%
American Indian	67	1255.45	81.29	10%	19%	55%	15%	6%	0%
Asian	31	1239.29	81.07	13%	32%	48%	6%	6%	0%
Hawaiian Pacific Islander	1	*	*	*	*	*	*	*	*
Multiracial	14	1252.14	81.24	7%	21%	64%	7%	7%	0%
Other	0	*	*	*	*	*	*	*	*
Gender									
Male	610	1259.13	74.56	10%	19%	55%	16%	3%	0%
Female	390	1255.66	67.40	10%	22%	58%	11%	2%	1%
Need									
Autism	222	1264.23	62.04	8%	26%	50%	16%	1%	0%
DD								0%	0%
ED	9	*	*	*	*	*	*	*	*
EDP	8	*	*	*	*	*	*	*	*
HI	9	*	*	*	*	*	*	*	*
MD	18	1271.67	49.37	6%	22%	61%	11%	0%	0%
MDSSI	53	1146.70	109.88	47%	40%	11%	2%	23%	0%
MIMR	359	1289.73	30.25	0%	7%	74%	19%	0%	0%
MOMR	141	1246.99	46.01	8%	38%	49%	6%	1%	0%
OHI	22	1283.45	44.60	9%	0%	68%	23%	0%	0%
OI	83	1211.40	90.38	24%	31%	43%	1%	8%	0%
SLD	32	1307.50	23.60	0%	0%	59%	41%	0%	0%
SLI	2	*	*	*	*	*	*	*	*
SMR	37	1132.57	93.84	65%	24%	11%	0%	16%	3%
VI	5	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	602	1266.37	65.31	8%	18%	58%	16%	2%	0%
No Lunch Assistance	396	1245.31	78.26	13%	23%	53%	10%	4%	1%
Other	2	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	997	1257.97	71.46	10%	20%	56%	14%	3%	0%
Migrant	1	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
ELL									
Non-ELL	965	1256.89	72.26	10%	21%	55%	13%	3%	0%
ELL	33	1291.00	23.78	0%	3%	76%	21%	0%	0%
Other	2	*	*	*	*	*	*	*	*

Note: FFBS=Falls Far Below the Standard; AS=Approaches the Standard; MS=Meets the Standard; ES=Exceeds the Standard; *Masked values. 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. (Table continued.)

	N	Scale Score		% at Performance Level					
		M	SD	FFBS	AS	MS	ES	NR	INV
Grade 7									
Total	944	1273.99	73.77	7%	21%	47%	24%	2%	0%
Ethnic Background									
White	378	1271.94	75.29	7%	22%	48%	24%	3%	0%
Black	68	1270.54	50.03	6%	26%	47%	21%	0%	0%
Hispanic	390	1277.17	76.86	7%	20%	46%	27%	2%	0%
American Indian	72	1279.94	64.67	6%	19%	50%	25%	1%	0%
Asian	22	1259.77	80.03	14%	18%	50%	18%	5%	0%
Hawaiian Pacific Islander	1	*	*	*	*	*	*	*	*
Multiracial	13	1249.31	79.25	8%	31%	62%	0%	8%	0%
Other	0	*	*	*	*	*	*	*	*
Gender									
Male	578	1276.34	72.99	7%	20%	45%	28%	2%	0%
Female	366	1270.28	74.93	8%	22%	51%	19%	2%	0%
Need									
Autism	223	1279.95	73.55	5%	20%	48%	27%	2%	0%
DD	0	*	*	*	*	*	*	*	*
ED	9	*	*	*	*	*	*	*	*
EDP	7	*	*	*	*	*	*	*	*
HI	3	*	*	*	*	*	*	*	*
MD	16	1272.88	38.75	0%	25%	63%	13%	0%	0%
MDSSI	59	1176.54	95.23	39%	42%	19%	0%	14%	0%
MIMR	335	1304.62	43.78	1%	6%	57%	36%	0%	0%
MOMR	138	1254.03	39.75	3%	41%	52%	4%	1%	0%
OHI	15	1308.60	62.57	0%	20%	40%	40%	0%	0%
OI	76	1228.20	85.38	18%	38%	36%	8%	7%	0%
SLD	31	1338.77	43.79	0%	0%	35%	65%	0%	0%
SLI	6	*	*	*	*	*	*	*	*
SMR	24	1165.83	98.90	42%	54%	4%	0%	17%	0%
VI	2	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	549	1283.21	68.27	4%	18%	50%	27%	2%	0%
No Lunch Assistance	393	1261.31	79.25	11%	25%	44%	20%	3%	0%
Other	2	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	938	1274.07	73.78	7%	21%	47%	24%	2%	0%
Migrant	4	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
ELL									
Non-ELL	914	1273.08	73.99	7%	21%	47%	24%	2%	0%
ELL	30	1301.97	61.22	3%	10%	57%	30%	0%	3%
Other	0	*	*	*	*	*	*	*	*

Note: FFBS=Falls Far Below the Standard; AS=Approaches the Standard; MS=Meets the Standard; ES=Exceeds the Standard; *Masked values. 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. (Table continued.)

	N	Scale Score		% at Performance Level					
		M	SD	FFBS	AS	MS	ES	NR	INV
Grade 8									
Total	910	1263.82	72.20	9%	21%	45%	25%	3%	0%
Ethnic Background									
White	375	1261.78	71.47	8%	24%	44%	24%	3%	1%
Black	48	1253.94	95.22	13%	15%	48%	25%	8%	0%
Hispanic	378	1265.99	71.61	10%	19%	47%	25%	3%	0%
American Indian	76	1273.07	61.71	4%	16%	47%	33%	3%	0%
Asian	20	1266.95	60.34	10%	15%	45%	30%	0%	0%
Hawaiian Pacific Islander	4	*	*	*	*	*	*	*	*
Multiracial	9	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
Gender									
Male	568	1269.28	70.34	8%	19%	44%	29%	3%	0%
Female	342	1254.75	74.41	11%	23%	48%	18%	4%	0%
Need									
Autism	183	1267.08	54.61	6%	30%	40%	24%	1%	0%
DD	0	*	*	*	*	*	*	*	*
ED	10	*	*	*	*	*	*	*	*
EDP	5	*	*	*	*	*	*	*	*
HI	5	*	*	*	*	*	*	*	*
MD	15	1261.80	38.87	7%	27%	53%	13%	0%	0%
MDSSI	50	1152.42	111.33	52%	24%	24%	0%	22%	0%
MIMR	311	1294.54	44.87	1%	6%	53%	40%	0%	1%
MOMR	143	1255.32	38.11	4%	34%	55%	7%	1%	0%
OHI	20	1288.60	33.68	0%	15%	45%	40%	0%	0%
OI	107	1219.71	96.41	22%	30%	40%	7%	11%	0%
SLD	36	1323.67	47.77	0%	0%	31%	69%	0%	3%
SLI	2	*	*	*	*	*	*	*	*
SMR	20	1169.30	87.44	45%	45%	10%	0%	15%	0%
VI	3	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	512	1270.90	65.01	7%	17%	49%	28%	3%	0%
No Lunch Assistance	398	1254.71	79.67	12%	26%	41%	22%	4%	1%
Other	0	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	908	1263.88	72.24	9%	21%	45%	25%	3%	0%
Migrant	2	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
ELL									
Non-ELL	879	1262.90	72.27	9%	21%	45%	25%	3%	0%
ELL	31	1289.90	66.16	3%	10%	48%	39%	3%	0%
Other	0	*	*	*	*	*	*	*	*

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2012 AIMS A Technical Report

	N	Scale Score		% at Performance Level					
		M	SD	FFBS	AS	MS	ES	NR	INV
High School									
Total	1035	1263.99	71.67	10%	21%	58%	11%	3%	0%
Ethnic Background									
White	409	1264.17	72.16	9%	23%	56%	12%	3%	0%
Black	87	1272.14	81.40	7%	16%	62%	15%	3%	0%
Hispanic	423	1260.00	70.88	12%	19%	60%	9%	2%	0%
American Indian	75	1261.87	69.29	9%	31%	47%	13%	1%	0%
Asian	30	1294.33	56.74	3%	13%	73%	10%	0%	0%
Hawaiian Pacific Islander	5	*	*	*	*	*	*	*	*
Multiracial	6	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
Gender									
Male	635	1264.17	71.65	9%	21%	59%	11%	2%	0%
Female	400	1263.71	71.79	11%	22%	57%	11%	3%	0%
Need									
Autism	200	1261.64	69.94	10%	28%	52%	11%	2%	0%
DD	0	*	*	*	*	*	*	*	*
ED	16	1304.75	32.63	0%	0%	88%	13%	0%	0%
EDP	20	1286.10	36.22	5%	0%	90%	5%	0%	0%
HI	7	*	*	*	*	*	*	*	*
MD	41	1272.46	47.88	5%	20%	63%	12%	0%	0%
MDSSI	53	1169.45	105.14	43%	36%	19%	2%	17%	2%
MIMR	339	1296.11	34.85	0%	8%	78%	14%	0%	0%
MOMR	167	1248.94	49.77	9%	40%	47%	4%	1%	0%
OHI	22	1300.82	57.89	5%	9%	50%	36%	0%	0%
OI	94	1225.56	88.60	21%	31%	45%	3%	7%	0%
SLD	35	1327.49	29.42	0%	0%	51%	49%	0%	0%
SLI	2	*	*	*	*	*	*	*	*
SMR	36	1157.83	99.02	50%	33%	17%	0%	17%	0%
VI	2	*	*	*	*	*	*	*	*
Other	1	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	580	1265.29	73.41	11%	18%	60%	12%	3%	0%
No Lunch Assistance	452	1262.36	69.65	9%	25%	56%	10%	2%	0%
Other	3	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	1024	1264.14	71.85	10%	21%	58%	11%	3%	0%
Migrant	8	*	*	*	*	*	*	*	*
Other	3	*	*	*	*	*	*	*	*
ELL									
Non-ELL	1003	1263.77	71.99	10%	21%	58%	11%	2%	0%
ELL	31	1272.03	62.13	3%	16%	65%	16%	3%	0%
Other	1	*	*	*	*	*	*	*	*

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Table 8.1.1.3
2012 AIMS A State Test Results
Reading Grades 3-8 and High School

	N	Scale Score		% at Performance Level					
		M	SD	FFBS	AS	MS	ES	NR	INV
Grade 3									
Total	945	1255.12	68.42	13%	21%	48%	18%	3%	0%
Ethnic Background									
White	330	1262.79	61.19	10%	19%	50%	21%	2%	0%
Black	70	1239.57	73.04	19%	23%	49%	10%	3%	0%
Hispanic	435	1252.07	72.25	14%	22%	45%	18%	4%	0%
American Indian	69	1240.96	69.74	17%	23%	52%	7%	4%	0%
Asian	23	1259.09	48.36	17%	9%	57%	17%	0%	0%
Hawaiian Pacific Islander	4	*	*	*	*	*	*	*	*
Multiracial	14	1304.43	76.87	7%	14%	36%	43%	0%	0%
Other								0%	0%
Gender									
Male	640	1255.23	67.60	13%	21%	48%	18%	3%	0%
Female	305	1254.90	70.21	13%	21%	48%	18%	4%	0%
Need									
Autism	302	1253.77	61.64	12%	26%	48%	14%	1%	0%
DD	17	1290.59	32.14	0%	6%	59%	35%	0%	0%
ED	6	*	*	*	*	*	*	*	*
EDP	0	*	*	*	*	*	*	*	*
HI	4	*	*	*	*	*	*	*	*
MD	12	1256.08	40.55	8%	17%	67%	8%	0%	0%
MDSSI	54	1139.70	104.09	74%	15%	7%	4%	28%	0%
MIMR	290	1285.29	35.39	1%	10%	61%	28%	0%	0%
MOMR	126	1241.00	38.97	16%	37%	44%	4%	0%	0%
OHI	15	1308.93	61.24	0%	7%	47%	47%	0%	0%
OI	63	1224.17	84.62	24%	30%	40%	6%	10%	0%
SLD	32	1306.78	38.71	0%	0%	44%	56%	0%	0%
SLI	1	*	*	*	*	*	*	*	*
SMR	18	1166.39	96.99	44%	44%	11%	0%	22%	0%
VI	4	*	*	*	*	*	*	*	*
Other	1	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	574	1256.95	68.15	13%	20%	49%	19%	3%	0%
No Lunch Assistance	371	1252.29	68.83	15%	22%	47%	16%	3%	0%
Other	0	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	938	1255.09	68.59	13%	21%	48%	18%	3%	0%
Migrant	7	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
ELL									
Non-ELL	876	1253.86	68.72	13%	22%	48%	17%	3%	0%
ELL	69	1271.14	62.73	12%	7%	52%	29%	1%	0%
Other	0	*	*	*	*	*	*	*	*

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	N	Scale Score		% at Performance Level					
		M	SD	FFBS	AS	MS	ES	NR	INV
Grade 4									
Total	936	1260.44	71.42	10%	18%	66%	6%	3%	0%
Ethnic Background									
White	351	1261.09	73.14	10%	17%	66%	7%	3%	0%
Black	67	1268.58	43.92	3%	30%	61%	6%	0%	0%
Hispanic	418	1259.20	72.13	9%	19%	67%	5%	3%	0%
American Indian	63	1257.86	83.01	14%	8%	73%	5%	6%	0%
Asian	22	1253.27	71.97	9%	23%	64%	5%	5%	0%
Hawaiian Pacific Islander	3	*	*	*	*	*	*	*	*
Multiracial	12	1261.17	70.99	17%	17%	50%	17%	0%	0%
Other	0	*	*	*	*	*	*	*	*
Gender									
Male	599	1258.98	73.93	10%	20%	64%	6%	3%	0%
Female	337	1263.02	66.75	9%	16%	70%	5%	2%	0%
Need									
Autism	276	1258.20	58.45	7%	30%	58%	5%	1%	0%
DD	7	*	*	*	*	*	*	*	*
ED	8	*	*	*	*	*	*	*	*
EDP	1	*	*	*	*	*	*	*	*
HI	6	*	*	*	*	*	*	*	*
MD	21	1259.86	92.28	10%	14%	67%	10%	10%	0%
MDSSI	45	1159.44	112.42	49%	24%	24%	2%	18%	0%
MIMR	297	1292.98	27.12	0%	5%	88%	7%	0%	0%
MOMR	124	1249.30	55.14	7%	31%	60%	1%	1%	0%
OHI	21	1297.57	38.38	0%	14%	71%	14%	0%	0%
OI	62	1201.26	110.38	32%	15%	50%	3%	15%	0%
SLD	40	1303.58	25.16	0%	3%	85%	13%	0%	0%
SLI	4	*	*	*	*	*	*	*	*
SMR	19	1143.63	85.89	68%	32%	0%	0%	11%	0%
VI	3	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	587	1264.40	69.49	9%	17%	68%	6%	3%	0%
No Lunch Assistance	348	1253.78	74.28	11%	21%	62%	5%	3%	0%
Other	1	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	927	1260.52	71.18	9%	18%	66%	6%	3%	0%
Migrant	8	*	*	*	*	*	*	*	*
Other	1	*	*	*	*	*	*	*	*
ELL									
Non-ELL	891	1259.47	71.90	10%	19%	66%	6%	3%	0%
ELL	45	1279.53	58.67	4%	11%	73%	11%	2%	0%
Other	0	*	*	*	*	*	*	*	*

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	N	Scale Score		% at Performance Level					
		M	SD	FFBS	AS	MS	ES	NR	INV
Grade 5									
Total	916	1263.98	85.14	9%	24%	49%	17%	3%	0%
Ethnic Background									
White	361	1266.55	76.62	7%	27%	51%	15%	2%	0%
Black	74	1268.26	75.75	5%	28%	47%	19%	0%	0%
Hispanic	391	1261.16	92.20	12%	22%	48%	18%	4%	0%
American Indian	52	1272.56	84.07	6%	25%	48%	21%	4%	0%
Asian	23	1253.17	95.47	17%	22%	39%	22%	4%	0%
Hawaiian Pacific Islander	1	*	*	*	*	*	*	*	*
Multiracial	14	1242.29	125.23	29%	14%	36%	21%	7%	0%
Other	0	*	*	*	*	*	*	*	*
Gender									
Male	590	1269.08	82.44	8%	26%	48%	18%	2%	0%
Female	326	1254.75	89.22	12%	22%	50%	16%	5%	0%
Need									
Autism	238	1267.77	74.10	4%	36%	45%	15%	1%	0%
DD	0	*	*	*	*	*	*	*	*
ED	8	*	*	*	*	*	*	*	*
EDP	4	*	*	*	*	*	*	*	*
HI	6	*	*	*	*	*	*	*	*
MD	18	1253.72	100.55	11%	33%	39%	17%	6%	0%
MDSSI	59	1151.15	104.72	42%	42%	15%	0%	20%	0%
MIMR	307	1304.52	53.41	0%	9%	63%	28%	0%	0%
MOMR	119	1246.16	57.20	9%	37%	50%	3%	1%	0%
OHI	21	1304.90	37.86	0%	5%	62%	33%	0%	0%
OI	89	1219.80	96.30	27%	24%	43%	7%	7%	0%
SLD	17	1337.41	51.40	0%	0%	47%	53%	0%	0%
SLI	4	*	*	*	*	*	*	*	*
SMR	22	1140.36	91.62	45%	41%	14%	0%	0%	0%
VI	4	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	569	1273.75	84.10	8%	19%	51%	21%	2%	0%
No Lunch Assistance	346	1248.35	84.37	11%	33%	45%	11%	3%	0%
Other	1	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	911	1264.07	85.22	9%	24%	49%	17%	3%	0%
Migrant	4	*	*	*	*	*	*	*	*
Other	1	*	*	*	*	*	*	*	*
ELL									
Non-ELL	884	1263.20	86.04	10%	25%	48%	17%	3%	0%
ELL	32	1285.72	51.28	0%	19%	69%	13%	0%	0%
Other	0	*	*	*	*	*	*	*	*

Note: FFBS=Falls Far Below the Standard; AS=Approaches the Standard; MS=Meets the Standard; ES=Exceeds the Standard; *Masked values. 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. (Table continued.)

	N	Scale Score		% at Performance Level					
		M	SD	FFBS	AS	MS	ES	NR	INV
Grade 6									
Total	1000	1282.13	98.82	10%	23%	40%	27%	2%	0%
Ethnic Background									
White	390	1279.78	100.29	11%	24%	39%	27%	2%	1%
Black	68	1302.01	93.07	7%	15%	41%	37%	3%	1%
Hispanic	429	1284.95	96.52	9%	23%	40%	28%	1%	0%
American Indian	67	1274.69	101.65	10%	16%	49%	24%	7%	0%
Asian	31	1245.58	89.58	10%	48%	32%	10%	6%	0%
Hawaiian Pacific Islander	1	*	*	*	*	*	*	*	*
Multiracial	14	1301.14	121.50	7%	21%	36%	36%	0%	0%
Other	0	*	*	*	*	*	*	*	*
Gender									
Male	610	1282.60	99.33	10%	23%	39%	29%	3%	0%
Female	390	1281.40	98.15	9%	24%	41%	25%	2%	1%
Need									
Autism	222	1277.82	86.26	7%	34%	34%	25%	1%	0%
DD	0	*	*	*	*	*	*	*	*
ED	9	*	*	*	*	*	*	*	*
EDP	8	*	*	*	*	*	*	*	*
HI	9	*	*	*	*	*	*	*	*
MD	18	1293.83	101.91	11%	22%	44%	22%	0%	0%
MDSSI	53	1141.83	112.65	45%	40%	13%	2%	17%	0%
MIMR	359	1332.56	66.29	0%	8%	51%	42%	0%	0%
MOMR	141	1256.78	64.09	6%	40%	45%	9%	1%	0%
OHI	22	1332.05	89.96	9%	5%	36%	50%	0%	0%
OI	83	1226.94	107.70	23%	34%	30%	13%	6%	0%
SLD	32	1365.47	63.85	0%	0%	31%	69%	0%	0%
SLI	2	*	*	*	*	*	*	*	*
SMR	37	1125.43	88.07	59%	41%	0%	0%	14%	3%
VI	5	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	602	1294.18	95.16	7%	21%	41%	31%	1%	0%
No Lunch Assistance	396	1264.57	100.94	13%	27%	38%	22%	3%	1%
Other	2	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	997	1282.42	98.57	9%	23%	40%	27%	2%	0%
Migrant	1	1294.00	0.00	0%	0%	100%	0%	0%	0%
Other	2	*	*	*	*	*	*	*	*
ELL									
Non-ELL	965	1280.10	98.16	10%	24%	40%	27%	2%	0%
ELL	33	1350.58	84.74	0%	6%	52%	42%	0%	0%
Other	2	*	*	*	*	*	*	*	*

Note: FFBS=Falls Far Below the Standard; AS=Approaches the Standard; MS=Meets the Standard; ES=Exceeds the Standard; *Masked values. 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. (Table continued.)

	N	Scale Score		% at Performance Level					
		M	SD	FFBS	AS	MS	ES	NR	INV
Grade 7									
Total	944	1287.58	98.65	11%	19%	41%	29%	3%	0%
Ethnic Background									
White	378	1291.39	106.78	13%	15%	40%	32%	3%	0%
Black	68	1278.57	81.98	10%	24%	46%	21%	0%	0%
Hispanic	390	1285.73	94.95	9%	23%	39%	28%	2%	0%
American Indian	72	1298.42	88.24	8%	14%	50%	28%	1%	0%
Asian	22	1267.32	107.50	18%	18%	41%	23%	5%	0%
Hawaiian Pacific Islander	1	*	*	*	*	*	*	*	*
Multiracial	13	1254.23	82.58	8%	23%	69%	0%	8%	0%
Other	0	*	*	*	*	*	*	*	*
Gender									
Male	578	1290.18	100.32	11%	19%	41%	29%	2%	0%
Female	366	1283.47	95.94	11%	19%	42%	28%	3%	0%
Need									
Autism	223	1289.79	98.44	9%	21%	41%	28%	1%	0%
DD	0	*	*	*	*	*	*	*	*
ED	9	*	*	*	*	*	*	*	*
EDP	7	*	*	*	*	*	*	*	*
HI	3	*	*	*	*	*	*	*	*
MD	16	1312.75	93.44	6%	25%	44%	25%	0%	0%
MDSSI	59	1154.97	104.05	53%	29%	19%	0%	17%	0%
MIMR	335	1334.49	62.46	0%	6%	51%	43%	0%	0%
MOMR	138	1256.77	52.99	4%	41%	49%	6%	1%	0%
OHI	15	1336.00	78.04	7%	13%	13%	67%	0%	0%
OI	76	1218.95	109.36	36%	24%	25%	16%	8%	0%
SLD	31	1371.55	73.07	0%	3%	32%	65%	0%	0%
SLI	6	*	*	*	*	*	*	*	*
SMR	24	1152.17	94.92	50%	38%	13%	0%	17%	0%
VI	2	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	549	1298.07	90.40	8%	18%	43%	31%	2%	0%
No Lunch Assistance	393	1273.25	107.54	15%	21%	39%	25%	4%	0%
Other	2	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	938	1287.81	98.67	11%	19%	41%	29%	3%	0%
Migrant	4	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
ELL									
Non-ELL	914	1286.36	99.08	11%	19%	41%	28%	3%	0%
ELL	30	1324.70	77.01	7%	10%	43%	40%	0%	3%
Other	0	*	*	*	*	*	*	*	*

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	N	Scale Score		% at Performance Level					
		M	SD	FFBS	AS	MS	ES	NR	INV
Grade 8									
Total	910	1279.48	87.08	9%	14%	56%	20%	3%	0%
Ethnic Background									
White	375	1277.33	85.87	10%	16%	54%	21%	3%	1%
Black	48	1275.00	111.96	13%	8%	52%	27%	8%	0%
Hispanic	378	1281.40	87.45	9%	13%	59%	19%	3%	0%
American Indian	76	1286.66	81.24	7%	12%	59%	22%	3%	0%
Asian	20	1275.95	47.13	5%	30%	50%	15%	0%	0%
Hawaiian Pacific Islander	4	*	*	*	*	*	*	*	*
Multiracial	9	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
Gender									
Male	568	1285.54	85.53	8%	13%	56%	23%	3%	0%
Female	342	1269.41	88.79	10%	17%	56%	17%	3%	0%
Need									
Autism	183	1275.89	71.69	8%	18%	60%	14%	1%	0%
DD								0%	0%
ED	10	*	*	*	*	*	*	*	*
EDP	5	*	*	*	*	*	*	*	*
HI	5	*	*	*	*	*	*	*	*
MD	15	1266.40	41.74	7%	20%	67%	7%	0%	0%
MDSSI	50	1156.90	108.68	52%	22%	26%	0%	20%	0%
MIMR	311	1321.93	62.55	1%	4%	60%	35%	0%	1%
MOMR	143	1263.48	52.16	3%	24%	67%	5%	1%	0%
OHI	20	1310.35	53.13	0%	10%	65%	25%	0%	0%
OI	107	1226.21	107.23	25%	20%	48%	7%	9%	0%
SLD	36	1356.03	66.22	0%	0%	39%	61%	0%	3%
SLI	2	*	*	*	*	*	*	*	*
SMR	20	1176.00	97.95	35%	50%	15%	0%	20%	0%
VI	3	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	513	1288.09	80.54	6%	13%	58%	23%	2%	0%
No Lunch Assistance	397	1268.35	93.80	13%	16%	54%	17%	4%	1%
Other	0	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	908	1279.63	87.09	9%	14%	56%	20%	3%	0%
Migrant	2	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
ELL									
Non-ELL	879	1279.09	87.81	9%	15%	55%	21%	3%	0%
ELL	31	1290.48	62.79	3%	0%	84%	13%	3%	0%
Other	0	*	*	*	*	*	*	*	*

Note: FFBS=Falls Far Below the Standard; AS=Approaches the Standard; MS=Meets the Standard; ES=Exceeds the Standard; *Masked values. 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. (Table continued.)

	N	Scale Score		% at Performance Level					
		M	SD	FFBS	AS	MS	ES	NR	INV
High School									
Total	1035	1295.44	94.08	8%	18%	49%	25%	2%	0%
Ethnic Background									
White	409	1296.19	96.64	7%	19%	49%	25%	3%	0%
Black	87	1303.53	97.49	7%	13%	48%	32%	1%	0%
Hispanic	423	1292.52	93.45	10%	16%	50%	24%	2%	0%
American Indian	75	1290.45	92.25	8%	28%	37%	27%	1%	0%
Asian	30	1311.60	70.89	3%	7%	67%	23%	0%	0%
Hawaiian Pacific Islander	5	*	*	*	*	*	*	*	*
Multiracial	6	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
Gender									
Male	635	1294.53	92.84	7%	18%	51%	24%	2%	0%
Female	400	1296.88	96.12	9%	18%	46%	28%	2%	0%
Need									
Autism	200	1283.01	90.60	8%	27%	46%	20%	1%	0%
DD	0	*	*	*	*	*	*	*	*
ED	16	1350.06	49.41	0%	0%	50%	50%	0%	0%
EDP	20	1318.25	36.36	0%	0%	75%	25%	0%	0%
HI	7	*	*	*	*	*	*	*	*
MD	41	1310.37	72.31	0%	17%	59%	24%	0%	0%
MDSSI	53	1186.38	104.01	40%	36%	23%	2%	17%	2%
MIMR	339	1342.14	66.83	0%	2%	59%	39%	0%	0%
MOMR	167	1268.45	59.36	5%	30%	58%	7%	0%	0%
OHI	22	1346.14	79.95	5%	5%	36%	55%	0%	0%
OI	94	1246.26	109.30	18%	26%	39%	17%	7%	0%
SLD	35	1388.80	70.58	0%	0%	40%	60%	0%	0%
SLI	2	*	*	*	*	*	*	*	*
SMR	36	1160.33	86.09	50%	50%	0%	0%	11%	0%
VI	2	*	*	*	*	*	*	*	*
Other	1	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	580	1301.22	94.16	8%	15%	50%	28%	2%	0%
No Lunch Assistance	452	1288.15	93.85	8%	21%	48%	22%	3%	0%
Other	3	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	1024	1295.67	94.32	8%	17%	49%	25%	2%	0%
Migrant	8	*	*	*	*	*	*	*	*
Other	3	*	*	*	*	*	*	*	*
ELL									
Non-ELL	1003	1295.28	94.45	8%	18%	49%	25%	2%	0%
ELL	31	1301.87	83.70	6%	10%	52%	32%	3%	0%
Other	1	*	*	*	*	*	*	*	*

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Table 8.1.1.4
2012 AIMS A State Test Results
Science Grades 4, 8, and 10

	N	Scale Score		% at Performance Level					
		M	SD	FFBS	AS	MS	ES	NR	INV
Grade 4									
Total	936	1276.95	82.25	8%	18%	56%	18%	3%	0%
Ethnic Background									
White	351	1280.89	87.01	9%	17%	53%	22%	3%	0%
Black	67	1286.73	57.59	4%	21%	58%	16%	0%	0%
Hispanic	418	1272.49	80.05	8%	21%	57%	14%	4%	0%
American Indian	63	1280.41	88.09	11%	11%	59%	19%	5%	0%
Asian	22	1267.73	89.63	9%	27%	45%	18%	5%	0%
Hawaiian Pacific Islander	3	*	*	*	*	*	*	*	*
Multiracial	12	1256.67	96.49	25%	8%	58%	8%	0%	0%
Other	0	*	*	*	*	*	*	*	*
Gender									
Male	599	1278.36	83.93	9%	19%	53%	20%	3%	0%
Female	337	1274.46	79.22	7%	18%	61%	14%	4%	0%
Need									
Autism	276	1269.36	63.94	7%	28%	53%	12%	1%	0%
DD	7	*	*	*	*	*	*	*	*
ED	8	*	*	*	*	*	*	*	*
EDP	1	*	*	*	*	*	*	*	*
HI	6	*	*	*	*	*	*	*	*
MD	21	1268.43	98.79	10%	14%	62%	14%	5%	0%
MDSSI	45	1159.73	115.43	47%	27%	27%	0%	20%	0%
MIMR	297	1316.82	47.02	0%	4%	69%	28%	0%	0%
MOMR	124	1260.95	49.70	5%	31%	59%	5%	1%	0%
OHI	21	1323.81	58.73	0%	0%	0%	100%	0%	0%
OI	62	1217.79	125.19	0%	14%	48%	38%	16%	0%
SLD	40	1329.43	45.52	29%	16%	42%	13%	0%	0%
SLI	4	*	*	*	*	*	*	*	*
SMR	19	1148.58	94.38	0%	0%	100%	0%	21%	0%
VI	3	*	*	*	*	*	*	*	*
Other	2	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	587	1282.62	82.03	7%	17%	56%	20%	3%	0%
No Lunch Assistance	348	1267.40	81.96	10%	21%	55%	14%	3%	0%
Other	1	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	927	1277.13	82.10	8%	19%	55%	18%	3%	0%
Migrant	8	*	*	*	*	*	*	*	*
Other	1	*	*	*	*	*	*	*	*
ELL									
Non-ELL	890	1275.56	82.45	9%	19%	55%	18%	3%	0%
ELL	45	1304.60	74.69	2%	9%	67%	22%	2%	0%
Other	1	*	*	*	*	*	*	*	*

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	N	Scale Score		% at Performance Level					
		M	SD	FFBS	AS	MS	ES	NR	INV
Grade 8									
Total	910	1270.15	77.41	8%	16%	55%	21%	3%	0%
Ethnic Background									
White	375	1271.87	77.34	8%	17%	56%	20%	3%	1%
Black	48	1256.52	96.78	13%	15%	52%	21%	8%	0%
Hispanic	378	1268.62	78.16	8%	16%	56%	20%	4%	0%
American Indian	76	1278.61	62.06	5%	11%	58%	26%	1%	0%
Asian	20	1276.45	48.85	5%	25%	40%	30%	0%	0%
Hawaiian Pacific Islander	4	*	*	*	*	*	*	*	*
Multiracial	9	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
Gender									
Male	568	1274.63	75.09	7%	16%	55%	23%	3%	0%
Female	342	1262.70	80.66	10%	17%	56%	18%	4%	0%
Need									
Autism	183	1268.95	60.48	6%	25%	54%	16%	1%	0%
DD	0	*	*	*	*	*	*	*	*
ED	10	*	*	*	*	*	*	*	*
EDP	5	*	*	*	*	*	*	*	*
HI	5	*	*	*	*	*	*	*	*
MD	15	1267.87	46.08	13%	7%	60%	20%	0%	0%
MDSSI	50	1153.14	112.53	44%	30%	26%	0%	26%	0%
MIMR	311	1305.35	46.13	1%	4%	61%	34%	0%	1%
MOMR	143	1258.59	42.79	4%	24%	65%	6%	1%	0%
OHI	20	1303.10	61.46	0%	10%	70%	20%	0%	0%
OI	107	1222.88	99.98	21%	26%	45%	8%	9%	0%
SLD	36	1340.83	62.81	0%	0%	42%	58%	0%	3%
SLI	2	*	*	*	*	*	*	*	*
SMR	20	1180.70	98.08	35%	45%	20%	0%	20%	0%
VI	3	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	513	1278.36	70.92	6%	13%	59%	22%	3%	0%
No Lunch Assistance	397	1259.53	83.96	11%	20%	50%	19%	4%	1%
Other	0	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	908	1270.23	77.46	8%	16%	55%	21%	3%	0%
Migrant	2	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
ELL									
Non-ELL	879	1269.43	77.84	8%	17%	55%	20%	3%	0%
ELL	31	1290.32	61.61	3%	3%	61%	32%	3%	0%
Other	0	*	*	*	*	*	*	*	*

Note: FFBS=Falls Far Below the Standard; AS=Approaches the Standard; MS=Meets the Standard; ES=Exceeds the Standard; *Masked values. 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. (Table continued.)

2012 AIMS A Technical Report

	N	Scale Score		% at Performance Level					
		M	SD	FFBS	AS	MS	ES	NR	INV
Grade 10									
Total	854	1266.46	71.25	8%	19%	56%	16%	2%	0%
Ethnic Background									
White	332	1264.11	71.51	7%	22%	54%	17%	3%	0%
Black	76	1269.46	82.01	12%	14%	54%	20%	3%	0%
Hispanic	361	1264.44	70.22	9%	20%	57%	14%	2%	0%
American Indian	49	1280.41	78.80	8%	16%	57%	18%	2%	0%
Asian	27	1280.00	33.91	4%	0%	81%	15%	0%	0%
Hawaiian Pacific Islander	3	*	*	*	*	*	*	*	*
Multiracial	6	*	*	*	*	*	*	*	*
Other	0	*	*	*	*	*	*	*	*
Gender									
Male	527	1265.76	70.72	8%	21%	55%	16%	3%	0%
Female	327	1267.58	72.19	8%	17%	59%	16%	2%	0%
Need									
Autism	159	1253.84	69.78	11%	31%	45%	12%	1%	0%
DD	0	*	*	*	*	*	*	*	*
ED	13	1299.85	27.75	0%	8%	77%	15%	0%	0%
EDP	12	1299.33	65.92	0%	8%	83%	8%	0%	0%
HI	6	*	*	*	*	*	*	*	*
MD	35	1281.69	51.37	6%	11%	66%	17%	0%	0%
MDSSI	41	1174.05	107.26	39%	39%	20%	2%	20%	2%
MIMR	300	1295.86	38.12	0%	4%	72%	24%	0%	0%
MOMR	133	1256.08	49.46	5%	34%	58%	4%	1%	0%
OHI	21	1304.62	69.74	5%	10%	38%	48%	0%	0%
OI	71	1230.83	83.25	18%	30%	46%	6%	8%	0%
SLD	34	1319.32	51.03	0%	0%	47%	53%	0%	0%
SLI	2	*	*	*	*	*	*	*	*
SMR	24	1141.83	101.59	50%	50%	0%	0%	17%	0%
VI	2	*	*	*	*	*	*	*	*
Other	1	*	*	*	*	*	*	*	*
SES									
Free/Reduced Lunch	496	1268.79	72.72	8%	17%	57%	18%	2%	0%
No Lunch Assistance	357	1263.29	69.22	8%	23%	55%	14%	3%	0%
Other	1	*	*	*	*	*	*	*	*
Migrant									
Non-Migrant	848	1266.49	71.44	8%	19%	56%	16%	2%	0%
Migrant	5	*	*	*	*	*	*	*	*
Other	1	*	*	*	*	*	*	*	*
ELL									
Non-ELL	823	1266.50	71.42	8%	20%	56%	16%	2%	0%
ELL	30	1266.23	68.63	10%	10%	63%	17%	3%	0%
Other	1	*	*	*	*	*	*	*	*

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Table 8.1.1.5
2012 AIMS A Frequency Distribution Mathematics Grade 3

Raw	Scale	Freq	Percent	Cuml	Raw	Scale	Freq	Percent	Cuml
0	1000	28	3.0%	3.0%	61	1261	9	1.0%	45.5%
1	1043	0	0.0%	3.0%	62	1262	7	0.7%	46.2%
2	1092	2	0.2%	3.2%	63	1263	9	1.0%	47.1%
3	1119	1	0.1%	3.3%	64	1264	10	1.1%	48.2%
4	1137	12	1.3%	4.5%	65	1265	10	1.1%	49.3%
5	1151	2	0.2%	4.8%	66	1266	9	1.0%	50.2%
6	1161	0	0.0%	4.8%	67	1267	10	1.1%	51.3%
7	1169	0	0.0%	4.8%	68	1268	13	1.4%	52.6%
8	1176	1	0.1%	4.9%	69	1269	4	0.4%	53.1%
9	1181	3	0.3%	5.2%	70	1270	9	1.0%	54.0%
10	1186	5	0.5%	5.7%	71	1271	15	1.6%	55.6%
11	1190	2	0.2%	5.9%	72	1272	13	1.4%	57.0%
12	1194	6	0.6%	6.6%	73	1273	13	1.4%	58.4%
13	1197	0	0.0%	6.6%	74	1274	13	1.4%	59.7%
14	1200	2	0.2%	6.8%	75	1275	9	1.0%	60.7%
15	1203	2	0.2%	7.0%	76	1276	10	1.1%	61.7%
16	1206	6	0.6%	7.6%	77	1277	8	0.8%	62.6%
17	1208	4	0.4%	8.0%	78	1278	12	1.3%	63.8%
18	1210	3	0.3%	8.4%	79	1279	13	1.4%	65.2%
19	1212	5	0.5%	8.9%	80	1280	14	1.5%	66.7%
20	1214	13	1.4%	10.3%	81	1281	9	1.0%	67.7%
21	1216	0	0.0%	10.3%	82	1282	19	2.0%	69.7%
22	1218	4	0.4%	10.7%	83	1283	13	1.4%	71.0%
23	1219	3	0.3%	11.0%	84	1285	13	1.4%	72.4%
24	1221	7	0.7%	11.7%	85	1286	11	1.2%	73.6%
25	1223	4	0.4%	12.2%	86	1287	9	1.0%	74.5%
26	1224	6	0.6%	12.8%	87	1288	10	1.1%	75.6%
27	1226	9	1.0%	13.7%	88	1290	10	1.1%	76.6%
28	1227	7	0.7%	14.5%	89	1291	11	1.2%	77.8%
29	1228	10	1.1%	15.5%	90	1292	8	0.8%	78.6%
30	1230	7	0.7%	16.3%	91	1294	9	1.0%	79.6%
31	1231	3	0.3%	16.6%	92	1295	13	1.4%	81.0%
32	1232	6	0.6%	17.2%	93	1296	8	0.8%	81.8%
33	1233	8	0.8%	18.1%	94	1298	10	1.1%	82.9%
34	1235	6	0.6%	18.7%	95	1299	8	0.8%	83.7%
35	1236	7	0.7%	19.5%	96	1301	10	1.1%	84.8%
36	1237	5	0.5%	20.0%	97	1303	7	0.7%	85.5%
37	1238	5	0.5%	20.5%	98	1305	3	0.3%	85.8%
38	1239	7	0.7%	21.2%	99	1306	20	2.1%	87.9%
39	1240	6	0.6%	21.9%	100	1308	8	0.8%	88.8%
40	1241	8	0.8%	22.7%	101	1310	8	0.8%	89.6%
41	1242	8	0.8%	23.6%	102	1312	9	1.0%	90.6%
42	1243	9	1.0%	24.5%	103	1315	6	0.6%	91.2%
43	1244	6	0.6%	25.2%	104	1317	12	1.3%	92.5%
44	1245	11	1.2%	26.3%	105	1320	6	0.6%	93.1%
45	1246	3	0.3%	26.6%	106	1322	9	1.0%	94.1%
46	1247	8	0.8%	27.5%	107	1325	11	1.2%	95.2%
47	1248	13	1.4%	28.9%	108	1328	6	0.6%	95.9%
48	1249	15	1.6%	30.4%	109	1332	2	0.2%	96.1%
49	1250	12	1.3%	31.7%	110	1336	4	0.4%	96.5%
50	1251	19	2.0%	33.7%	111	1340	7	0.7%	97.3%
51	1252	14	1.5%	35.2%	112	1345	7	0.7%	98.0%
52	1253	13	1.4%	36.6%	113	1350	3	0.3%	98.3%
53	1254	6	0.6%	37.2%	114	1357	4	0.4%	98.7%
54	1255	7	0.7%	37.9%	115	1365	2	0.2%	98.9%
55	1256	10	1.1%	39.0%	116	1375	6	0.6%	99.6%
56	1257	11	1.2%	40.2%	117	1389	1	0.1%	99.7%
57	1258	8	0.8%	41.0%	118	1410	1	0.1%	99.8%
58	1259	9	1.0%	42.0%	119	1450	2	0.2%	100.0%
59	1260	8	0.8%	42.8%	120	1500	0	0.0%	100.0%
60	1260	16	1.7%	44.5%					

Table 8.1.1.6
2012 AIMS A Frequency Distribution Mathematics Grade 4

Raw	Scale	Freq	Percent	Cuml	Raw	Scale	Freq	Percent	Cuml
0	1000	35	3.7%	3.7%	61	1260	10	1.1%	37.4%
1	1000	4	0.4%	4.2%	62	1261	12	1.3%	38.7%
2	1053	0	0.0%	4.2%	63	1262	7	0.7%	39.4%
3	1085	0	0.0%	4.2%	64	1263	13	1.4%	40.8%
4	1107	4	0.4%	4.6%	65	1264	8	0.9%	41.7%
5	1124	1	0.1%	4.7%	66	1265	6	0.6%	42.3%
6	1137	0	0.0%	4.7%	67	1266	9	1.0%	43.3%
7	1147	1	0.1%	4.8%	68	1268	14	1.5%	44.8%
8	1155	4	0.4%	5.2%	69	1269	11	1.2%	45.9%
9	1162	1	0.1%	5.3%	70	1270	14	1.5%	47.4%
10	1169	1	0.1%	5.4%	71	1271	6	0.6%	48.1%
11	1174	1	0.1%	5.6%	72	1272	13	1.4%	49.5%
12	1179	7	0.7%	6.3%	73	1273	11	1.2%	50.6%
13	1183	3	0.3%	6.6%	74	1274	6	0.6%	51.3%
14	1187	4	0.4%	7.1%	75	1275	5	0.5%	51.8%
15	1190	0	0.0%	7.1%	76	1276	15	1.6%	53.4%
16	1194	4	0.4%	7.5%	77	1277	6	0.6%	54.1%
17	1197	0	0.0%	7.5%	78	1279	11	1.2%	55.2%
18	1199	3	0.3%	7.8%	79	1280	16	1.7%	56.9%
19	1202	1	0.1%	7.9%	80	1281	10	1.1%	58.0%
20	1204	4	0.4%	8.3%	81	1282	9	1.0%	59.0%
21	1207	5	0.5%	8.9%	82	1283	18	1.9%	60.9%
22	1209	1	0.1%	9.0%	83	1285	10	1.1%	62.0%
23	1211	1	0.1%	9.1%	84	1286	23	2.5%	64.4%
24	1213	3	0.3%	9.4%	85	1287	11	1.2%	65.6%
25	1215	1	0.1%	9.5%	86	1288	11	1.2%	66.8%
26	1217	3	0.3%	9.8%	87	1290	11	1.2%	67.9%
27	1218	4	0.4%	10.3%	88	1291	13	1.4%	69.3%
28	1220	9	1.0%	11.2%	89	1293	8	0.9%	70.2%
29	1222	5	0.5%	11.8%	90	1294	12	1.3%	71.5%
30	1223	8	0.9%	12.6%	91	1296	8	0.9%	72.3%
31	1225	7	0.7%	13.4%	92	1297	21	2.2%	74.6%
32	1226	4	0.4%	13.8%	93	1299	9	1.0%	75.5%
33	1228	6	0.6%	14.4%	94	1300	12	1.3%	76.8%
34	1229	5	0.5%	15.0%	95	1302	10	1.1%	77.9%
35	1230	9	1.0%	15.9%	96	1304	9	1.0%	78.8%
36	1232	6	0.6%	16.6%	97	1306	4	0.4%	79.3%
37	1233	5	0.5%	17.1%	98	1307	8	0.9%	80.1%
38	1234	5	0.5%	17.6%	99	1309	12	1.3%	81.4%
39	1236	5	0.5%	18.2%	100	1312	12	1.3%	82.7%
40	1237	7	0.7%	18.9%	101	1314	7	0.7%	83.4%
41	1238	3	0.3%	19.2%	102	1316	14	1.5%	84.9%
42	1239	6	0.6%	19.9%	103	1318	13	1.4%	86.3%
43	1240	7	0.7%	20.6%	104	1321	15	1.6%	87.9%
44	1242	5	0.5%	21.2%	105	1324	7	0.7%	88.7%
45	1243	6	0.6%	21.8%	106	1327	7	0.7%	89.4%
46	1244	5	0.5%	22.3%	107	1330	13	1.4%	90.8%
47	1245	6	0.6%	23.0%	108	1333	10	1.1%	91.9%
48	1246	8	0.9%	23.8%	109	1337	8	0.9%	92.7%
49	1247	10	1.1%	24.9%	110	1341	6	0.6%	93.4%
50	1248	9	1.0%	25.9%	111	1346	7	0.7%	94.1%
51	1250	5	0.5%	26.4%	112	1351	11	1.2%	95.3%
52	1251	11	1.2%	27.6%	113	1357	6	0.6%	95.9%
53	1252	7	0.7%	28.3%	114	1364	6	0.6%	96.6%
54	1253	9	1.0%	29.3%	115	1372	7	0.7%	97.3%
55	1254	7	0.7%	30.0%	116	1383	8	0.9%	98.2%
56	1255	13	1.4%	31.4%	117	1397	3	0.3%	98.5%
57	1256	15	1.6%	33.0%	118	1418	5	0.5%	99.0%
58	1257	12	1.3%	34.3%	119	1459	4	0.4%	99.5%
59	1258	9	1.0%	35.3%	120	1500	5	0.5%	100.0%
60	1259	10	1.1%	36.3%					

Table 8.1.1.7
2012 AIMS A Frequency Distribution Mathematics Grade 5

Raw	Scale	Freq	Percent	Cuml	Raw	Scale	Freq	Percent	Cuml
0	1000	26	2.8%	2.8%	61	1260	13	1.4%	38.8%
1	1018	1	0.1%	2.9%	62	1261	12	1.3%	40.1%
2	1069	2	0.2%	3.2%	63	1262	12	1.3%	41.4%
3	1098	2	0.2%	3.4%	64	1263	12	1.3%	42.7%
4	1118	4	0.4%	3.8%	65	1264	16	1.7%	44.4%
5	1133	1	0.1%	3.9%	66	1265	7	0.8%	45.2%
6	1144	2	0.2%	4.1%	67	1266	19	2.1%	47.3%
7	1153	0	0.0%	4.1%	68	1267	14	1.5%	48.8%
8	1161	7	0.8%	4.9%	69	1268	11	1.2%	50.0%
9	1167	0	0.0%	4.9%	70	1269	15	1.6%	51.6%
10	1173	0	0.0%	4.9%	71	1270	11	1.2%	52.8%
11	1178	1	0.1%	5.0%	72	1271	11	1.2%	54.0%
12	1182	9	1.0%	6.0%	73	1272	11	1.2%	55.2%
13	1186	1	0.1%	6.1%	74	1273	19	2.1%	57.3%
14	1190	2	0.2%	6.3%	75	1274	14	1.5%	58.8%
15	1193	3	0.3%	6.7%	76	1275	11	1.2%	60.0%
16	1196	5	0.5%	7.2%	77	1276	13	1.4%	61.5%
17	1199	2	0.2%	7.4%	78	1277	12	1.3%	62.8%
18	1201	2	0.2%	7.6%	79	1278	19	2.1%	64.8%
19	1204	1	0.1%	7.8%	80	1279	15	1.6%	66.5%
20	1206	8	0.9%	8.6%	81	1280	14	1.5%	68.0%
21	1208	4	0.4%	9.1%	82	1281	13	1.4%	69.4%
22	1210	3	0.3%	9.4%	83	1282	19	2.1%	71.5%
23	1212	3	0.3%	9.7%	84	1283	16	1.7%	73.3%
24	1214	8	0.9%	10.6%	85	1285	14	1.5%	74.8%
25	1216	2	0.2%	10.8%	86	1286	18	2.0%	76.7%
26	1218	5	0.5%	11.4%	87	1287	17	1.9%	78.6%
27	1219	3	0.3%	11.7%	88	1288	11	1.2%	79.8%
28	1221	10	1.1%	12.8%	89	1289	9	1.0%	80.8%
29	1223	4	0.4%	13.2%	90	1291	8	0.9%	81.7%
30	1224	3	0.3%	13.5%	91	1292	14	1.5%	83.2%
31	1226	3	0.3%	13.9%	92	1293	14	1.5%	84.7%
32	1227	6	0.7%	14.5%	93	1295	10	1.1%	85.8%
33	1228	3	0.3%	14.8%	94	1296	9	1.0%	86.8%
34	1230	1	0.1%	15.0%	95	1297	7	0.8%	87.6%
35	1231	3	0.3%	15.3%	96	1299	12	1.3%	88.9%
36	1232	7	0.8%	16.0%	97	1300	10	1.1%	90.0%
37	1234	6	0.7%	16.7%	98	1302	10	1.1%	91.0%
38	1235	3	0.3%	17.0%	99	1304	11	1.2%	92.2%
39	1236	8	0.9%	17.9%	100	1305	12	1.3%	93.6%
40	1237	5	0.5%	18.4%	101	1307	8	0.9%	94.4%
41	1239	14	1.5%	20.0%	102	1309	6	0.7%	95.1%
42	1240	5	0.5%	20.5%	103	1311	11	1.2%	96.3%
43	1241	6	0.7%	21.2%	104	1313	7	0.8%	97.1%
44	1242	11	1.2%	22.4%	105	1316	6	0.7%	97.7%
45	1243	5	0.5%	22.9%	106	1318	4	0.4%	98.1%
46	1244	6	0.7%	23.6%	107	1321	0	0.0%	98.1%
47	1245	9	1.0%	24.6%	108	1324	1	0.1%	98.3%
48	1246	6	0.7%	25.2%	109	1327	2	0.2%	98.5%
49	1247	8	0.9%	26.1%	110	1331	1	0.1%	98.6%
50	1249	11	1.2%	27.3%	111	1335	1	0.1%	98.7%
51	1250	3	0.3%	27.6%	112	1339	4	0.4%	99.1%
52	1251	14	1.5%	29.1%	113	1345	1	0.1%	99.2%
53	1252	13	1.4%	30.6%	114	1351	3	0.3%	99.6%
54	1253	8	0.9%	31.4%	115	1359	1	0.1%	99.7%
55	1254	12	1.3%	32.8%	116	1370	0	0.0%	99.7%
56	1255	8	0.9%	33.6%	117	1384	0	0.0%	99.7%
57	1256	9	1.0%	34.6%	118	1406	1	0.1%	99.8%
58	1257	5	0.5%	35.2%	119	1449	0	0.0%	99.8%
59	1258	10	1.1%	36.2%	120	1500	2	0.2%	100.0%
60	1259	10	1.1%	37.3%					

Table 8.1.1.8
2012 AIMS A Frequency Distribution Mathematics Grade 6

Raw	Scale	Freq	Percent	Cuml	Raw	Scale	Freq	Percent	Cuml
0	1000	34	3.4%	3.4%	61	1256	7	0.7%	36.0%
1	1000	2	0.2%	3.6%	62	1258	7	0.7%	36.7%
2	1000	3	0.3%	3.9%	63	1259	18	1.8%	38.5%
3	1000	1	0.1%	4.0%	64	1261	15	1.5%	40.0%
4	1023	1	0.1%	4.1%	65	1262	9	0.9%	40.9%
5	1047	0	0.0%	4.1%	66	1264	10	1.0%	41.9%
6	1066	0	0.0%	4.1%	67	1265	11	1.1%	43.0%
7	1082	0	0.0%	4.1%	68	1267	17	1.7%	44.7%
8	1094	4	0.4%	4.5%	69	1268	13	1.3%	46.0%
9	1105	3	0.3%	4.8%	70	1270	12	1.2%	47.2%
10	1115	3	0.3%	5.1%	71	1271	14	1.4%	48.6%
11	1123	3	0.3%	5.4%	72	1273	17	1.7%	50.2%
12	1130	11	1.1%	6.5%	73	1274	18	1.8%	52.0%
13	1137	4	0.4%	6.9%	74	1276	15	1.5%	53.5%
14	1143	2	0.2%	7.1%	75	1277	21	2.1%	55.6%
15	1149	1	0.1%	7.2%	76	1279	19	1.9%	57.5%
16	1154	8	0.8%	8.0%	77	1281	10	1.0%	58.5%
17	1159	1	0.1%	8.1%	78	1282	24	2.4%	60.9%
18	1163	2	0.2%	8.3%	79	1284	12	1.2%	62.1%
19	1167	3	0.3%	8.6%	80	1285	18	1.8%	63.9%
20	1171	5	0.5%	9.1%	81	1287	19	1.9%	65.8%
21	1175	1	0.1%	9.2%	82	1289	13	1.3%	67.1%
22	1178	4	0.4%	9.6%	83	1290	26	2.6%	69.7%
23	1181	3	0.3%	9.9%	84	1292	16	1.6%	71.3%
24	1184	4	0.4%	10.3%	85	1294	12	1.2%	72.5%
25	1187	2	0.2%	10.5%	86	1296	23	2.3%	74.8%
26	1190	5	0.5%	11.0%	87	1298	21	2.1%	76.9%
27	1193	0	0.0%	11.0%	88	1299	20	2.0%	78.9%
28	1196	3	0.3%	11.3%	89	1301	17	1.7%	80.6%
29	1198	3	0.3%	11.6%	90	1303	11	1.1%	81.7%
30	1201	5	0.5%	12.1%	91	1305	12	1.2%	82.9%
31	1203	5	0.5%	12.6%	92	1307	12	1.2%	84.0%
32	1205	7	0.7%	13.3%	93	1309	8	0.8%	84.8%
33	1208	7	0.7%	14.0%	94	1312	16	1.6%	86.4%
34	1210	4	0.4%	14.4%	95	1314	12	1.2%	87.6%
35	1212	6	0.6%	15.0%	96	1316	13	1.3%	88.9%
36	1214	5	0.5%	15.5%	97	1319	5	0.5%	89.4%
37	1216	10	1.0%	16.5%	98	1321	15	1.5%	90.9%
38	1218	5	0.5%	16.9%	99	1324	17	1.7%	92.6%
39	1220	4	0.4%	17.3%	100	1326	5	0.5%	93.1%
40	1222	8	0.8%	18.1%	101	1329	10	1.0%	94.1%
41	1224	5	0.5%	18.6%	102	1332	7	0.7%	94.8%
42	1226	6	0.6%	19.2%	103	1335	9	0.9%	95.7%
43	1227	7	0.7%	19.9%	104	1339	6	0.6%	96.3%
44	1229	3	0.3%	20.2%	105	1342	3	0.3%	96.6%
45	1231	2	0.2%	20.4%	106	1346	4	0.4%	97.0%
46	1233	11	1.1%	21.5%	107	1350	3	0.3%	97.3%
47	1234	4	0.4%	21.9%	108	1355	5	0.5%	97.8%
48	1236	12	1.2%	23.1%	109	1360	4	0.4%	98.2%
49	1238	10	1.0%	24.1%	110	1366	8	0.8%	99.0%
50	1239	5	0.5%	24.6%	111	1372	1	0.1%	99.1%
51	1241	14	1.4%	26.0%	112	1379	1	0.1%	99.2%
52	1242	7	0.7%	26.7%	113	1387	2	0.2%	99.4%
53	1244	8	0.8%	27.5%	114	1397	1	0.1%	99.5%
54	1246	8	0.8%	28.3%	115	1409	2	0.2%	99.7%
55	1247	6	0.6%	28.9%	116	1425	1	0.1%	99.8%
56	1249	15	1.5%	30.4%	117	1446	1	0.1%	99.9%
57	1250	14	1.4%	31.8%	118	1480	0	0.0%	99.9%
58	1252	8	0.8%	32.6%	119	1500	1	0.1%	100.0%
59	1253	10	1.0%	33.6%	120	1500	0	0.0%	100.0%
60	1255	17	1.7%	35.3%					

Table 8.1.1.9
2012 AIMS A Frequency Distribution Mathematics Grade 7

Raw	Scale	Freq	Percent	Cuml	Raw	Scale	Freq	Percent	Cuml
0	1000	23	2.4%	2.4%	61	1266	7	0.7%	39.0%
1	1000	3	0.3%	2.8%	62	1267	10	1.1%	40.0%
2	1000	0	0.0%	2.8%	63	1269	15	1.6%	41.6%
3	1015	1	0.1%	2.9%	64	1270	13	1.4%	43.0%
4	1045	1	0.1%	3.0%	65	1271	9	1.0%	44.0%
5	1068	3	0.3%	3.3%	66	1273	11	1.2%	45.1%
6	1086	0	0.0%	3.3%	67	1274	6	0.6%	45.8%
7	1101	0	0.0%	3.3%	68	1275	15	1.6%	47.4%
8	1113	5	0.5%	3.8%	69	1277	13	1.4%	48.7%
9	1124	1	0.1%	3.9%	70	1278	6	0.6%	49.4%
10	1133	1	0.1%	4.0%	71	1279	13	1.4%	50.7%
11	1141	1	0.1%	4.1%	72	1281	18	1.9%	52.6%
12	1148	5	0.5%	4.7%	73	1282	5	0.5%	53.2%
13	1155	4	0.4%	5.1%	74	1283	13	1.4%	54.6%
14	1161	2	0.2%	5.3%	75	1285	16	1.7%	56.3%
15	1166	3	0.3%	5.6%	76	1286	15	1.6%	57.8%
16	1171	6	0.6%	6.3%	77	1288	7	0.7%	58.6%
17	1175	2	0.2%	6.5%	78	1289	12	1.3%	59.9%
18	1180	5	0.5%	7.0%	79	1291	8	0.8%	60.7%
19	1184	1	0.1%	7.1%	80	1292	14	1.5%	62.2%
20	1187	1	0.1%	7.2%	81	1294	6	0.6%	62.8%
21	1191	4	0.4%	7.6%	82	1295	10	1.1%	63.9%
22	1194	1	0.1%	7.7%	83	1297	7	0.7%	64.6%
23	1197	1	0.1%	7.8%	84	1298	7	0.7%	65.4%
24	1200	3	0.3%	8.2%	85	1300	12	1.3%	66.6%
25	1203	3	0.3%	8.5%	86	1301	12	1.3%	67.9%
26	1206	5	0.5%	9.0%	87	1303	17	1.8%	69.7%
27	1208	3	0.3%	9.3%	88	1305	9	1.0%	70.7%
28	1211	9	1.0%	10.3%	89	1307	13	1.4%	72.0%
29	1213	2	0.2%	10.5%	90	1308	8	0.8%	72.9%
30	1216	7	0.7%	11.2%	91	1310	9	1.0%	73.8%
31	1218	4	0.4%	11.7%	92	1312	9	1.0%	74.8%
32	1220	9	1.0%	12.6%	93	1314	7	0.7%	75.5%
33	1222	3	0.3%	12.9%	94	1316	11	1.2%	76.7%
34	1224	6	0.6%	13.6%	95	1318	12	1.3%	78.0%
35	1226	6	0.6%	14.2%	96	1320	12	1.3%	79.2%
36	1228	3	0.3%	14.5%	97	1323	16	1.7%	80.9%
37	1230	7	0.7%	15.3%	98	1325	8	0.8%	81.8%
38	1232	11	1.2%	16.4%	99	1327	12	1.3%	83.1%
39	1233	10	1.1%	17.5%	100	1330	12	1.3%	84.3%
40	1235	10	1.1%	18.5%	101	1333	12	1.3%	85.6%
41	1237	14	1.5%	20.0%	102	1336	15	1.6%	87.2%
42	1238	9	1.0%	21.0%	103	1339	9	1.0%	88.1%
43	1240	8	0.8%	21.8%	104	1342	12	1.3%	89.4%
44	1242	9	1.0%	22.8%	105	1345	12	1.3%	90.7%
45	1243	13	1.4%	24.2%	106	1349	8	0.8%	91.5%
46	1245	6	0.6%	24.8%	107	1353	9	1.0%	92.5%
47	1246	11	1.2%	26.0%	108	1358	9	1.0%	93.4%
48	1248	10	1.1%	27.0%	109	1362	8	0.8%	94.3%
49	1249	10	1.1%	28.1%	110	1368	5	0.5%	94.8%
50	1251	4	0.4%	28.5%	111	1374	5	0.5%	95.3%
51	1252	10	1.1%	29.6%	112	1381	8	0.8%	96.2%
52	1254	16	1.7%	31.3%	113	1389	4	0.4%	96.6%
53	1255	8	0.8%	32.1%	114	1398	7	0.7%	97.4%
54	1256	3	0.3%	32.4%	115	1410	9	1.0%	98.3%
55	1258	5	0.5%	32.9%	116	1424	4	0.4%	98.7%
56	1259	12	1.3%	34.2%	117	1444	4	0.4%	99.2%
57	1260	8	0.8%	35.1%	118	1474	4	0.4%	99.6%
58	1262	10	1.1%	36.1%	119	1500	3	0.3%	99.9%
59	1263	8	0.8%	37.0%	120	1500	1	0.1%	100.0%
60	1265	12	1.3%	38.2%					

Table 8.1.1.10
2012 AIMS A Frequency Distribution Mathematics Grade 8

Raw	Scale	Freq	Percent	Cuml	Raw	Scale	Freq	Percent	Cuml
0	1000	33	3.6%	3.6%	61	1263	13	1.4%	42.7%
1	1000	1	0.1%	3.7%	62	1265	10	1.1%	43.8%
2	1000	1	0.1%	3.8%	63	1266	10	1.1%	44.9%
3	1026	2	0.2%	4.1%	64	1267	5	0.5%	45.5%
4	1055	3	0.3%	4.4%	65	1268	10	1.1%	46.5%
5	1076	3	0.3%	4.7%	66	1270	14	1.5%	48.1%
6	1093	0	0.0%	4.7%	67	1271	11	1.2%	49.3%
7	1107	0	0.0%	4.7%	68	1272	9	1.0%	50.3%
8	1119	3	0.3%	5.0%	69	1274	11	1.2%	51.5%
9	1128	0	0.0%	5.0%	70	1275	11	1.2%	52.7%
10	1137	0	0.0%	5.0%	71	1276	13	1.4%	54.1%
11	1144	0	0.0%	5.0%	72	1278	10	1.1%	55.2%
12	1151	3	0.3%	5.4%	73	1279	7	0.8%	56.0%
13	1157	2	0.2%	5.6%	74	1281	15	1.6%	57.6%
14	1162	0	0.0%	5.6%	75	1282	15	1.6%	59.3%
15	1167	2	0.2%	5.8%	76	1283	11	1.2%	60.5%
16	1172	5	0.5%	6.4%	77	1285	9	1.0%	61.4%
17	1176	3	0.3%	6.7%	78	1286	10	1.1%	62.5%
18	1180	1	0.1%	6.8%	79	1288	10	1.1%	63.6%
19	1184	4	0.4%	7.2%	80	1289	16	1.8%	65.4%
20	1187	4	0.4%	7.7%	81	1290	12	1.3%	66.7%
21	1191	0	0.0%	7.7%	82	1292	14	1.5%	68.2%
22	1194	4	0.4%	8.1%	83	1293	12	1.3%	69.6%
23	1197	1	0.1%	8.2%	84	1295	10	1.1%	70.6%
24	1199	5	0.5%	8.8%	85	1297	12	1.3%	72.0%
25	1202	1	0.1%	8.9%	86	1298	16	1.8%	73.7%
26	1205	3	0.3%	9.2%	87	1300	10	1.1%	74.8%
27	1207	0	0.0%	9.2%	88	1301	12	1.3%	76.1%
28	1209	6	0.7%	9.9%	89	1303	5	0.5%	76.7%
29	1212	3	0.3%	10.2%	90	1305	11	1.2%	77.9%
30	1214	1	0.1%	10.3%	91	1307	14	1.5%	79.4%
31	1216	6	0.7%	11.0%	92	1308	14	1.5%	80.9%
32	1218	7	0.8%	11.7%	93	1310	8	0.9%	81.8%
33	1220	4	0.4%	12.2%	94	1312	11	1.2%	83.0%
34	1222	12	1.3%	13.5%	95	1314	12	1.3%	84.3%
35	1224	7	0.8%	14.2%	96	1316	13	1.4%	85.8%
36	1226	6	0.7%	14.9%	97	1319	10	1.1%	86.9%
37	1228	13	1.4%	16.3%	98	1321	5	0.5%	87.4%
38	1229	6	0.7%	17.0%	99	1323	10	1.1%	88.5%
39	1231	8	0.9%	17.9%	100	1326	8	0.9%	89.4%
40	1233	6	0.7%	18.5%	101	1328	15	1.6%	91.0%
41	1234	8	0.9%	19.4%	102	1331	5	0.5%	91.6%
42	1236	10	1.1%	20.5%	103	1334	7	0.8%	92.3%
43	1238	8	0.9%	21.4%	104	1337	10	1.1%	93.4%
44	1239	10	1.1%	22.5%	105	1340	6	0.7%	94.1%
45	1241	13	1.4%	23.9%	106	1344	7	0.8%	94.9%
46	1242	8	0.9%	24.8%	107	1348	10	1.1%	95.9%
47	1244	3	0.3%	25.1%	108	1352	5	0.5%	96.5%
48	1245	16	1.8%	26.8%	109	1356	6	0.7%	97.2%
49	1247	8	0.9%	27.7%	110	1362	3	0.3%	97.5%
50	1248	14	1.5%	29.2%	111	1367	3	0.3%	97.8%
51	1250	7	0.8%	30.0%	112	1374	2	0.2%	98.0%
52	1251	6	0.7%	30.7%	113	1381	3	0.3%	98.4%
53	1252	11	1.2%	31.9%	114	1390	3	0.3%	98.7%
54	1254	10	1.1%	33.0%	115	1401	3	0.3%	99.0%
55	1255	9	1.0%	34.0%	116	1415	2	0.2%	99.2%
56	1256	18	2.0%	35.9%	117	1435	3	0.3%	99.6%
57	1258	11	1.2%	37.1%	118	1464	1	0.1%	99.7%
58	1259	14	1.5%	38.7%	119	1500	2	0.2%	99.9%
59	1261	9	1.0%	39.6%	120	1500	1	0.1%	100.0%
60	1262	15	1.6%	41.3%					

Table 8.1.1.11
2012 AIMS A Frequency Distribution Mathematics High School

Raw	Scale	Freq	Percent	Cuml	Raw	Scale	Freq	Percent	Cuml
0	1000	32	3.1%	3.1%	61	1268	12	1.2%	44.7%
1	1000	2	0.2%	3.3%	62	1270	10	1.0%	45.7%
2	1000	3	0.3%	3.6%	63	1271	13	1.3%	46.9%
3	1039	0	0.0%	3.6%	64	1273	14	1.4%	48.3%
4	1067	8	0.8%	4.3%	65	1274	9	0.9%	49.1%
5	1088	0	0.0%	4.3%	66	1275	9	0.9%	50.0%
6	1104	0	0.0%	4.3%	67	1277	11	1.1%	51.1%
7	1117	2	0.2%	4.5%	68	1278	13	1.3%	52.3%
8	1128	4	0.4%	4.9%	69	1280	14	1.4%	53.7%
9	1137	2	0.2%	5.1%	70	1281	6	0.6%	54.2%
10	1145	2	0.2%	5.3%	71	1283	19	1.8%	56.1%
11	1151	0	0.0%	5.3%	72	1284	13	1.3%	57.3%
12	1158	9	0.9%	6.2%	73	1286	16	1.5%	58.9%
13	1163	2	0.2%	6.4%	74	1287	13	1.3%	60.1%
14	1168	3	0.3%	6.7%	75	1289	14	1.4%	61.5%
15	1173	3	0.3%	6.9%	76	1291	14	1.4%	62.8%
16	1177	7	0.7%	7.6%	77	1292	14	1.4%	64.2%
17	1181	4	0.4%	8.0%	78	1294	16	1.5%	65.7%
18	1185	1	0.1%	8.1%	79	1295	12	1.2%	66.9%
19	1188	6	0.6%	8.7%	80	1297	15	1.4%	68.3%
20	1192	10	1.0%	9.7%	81	1299	16	1.5%	69.9%
21	1195	0	0.0%	9.7%	82	1300	13	1.3%	71.1%
22	1198	3	0.3%	9.9%	83	1302	20	1.9%	73.1%
23	1200	5	0.5%	10.4%	84	1304	13	1.3%	74.3%
24	1203	11	1.1%	11.5%	85	1306	21	2.0%	76.4%
25	1206	4	0.4%	11.9%	86	1308	13	1.3%	77.6%
26	1208	6	0.6%	12.5%	87	1309	15	1.4%	79.1%
27	1211	1	0.1%	12.5%	88	1311	9	0.9%	79.9%
28	1213	5	0.5%	13.0%	89	1313	14	1.4%	81.3%
29	1215	4	0.4%	13.4%	90	1315	12	1.2%	82.4%
30	1217	7	0.7%	14.1%	91	1317	7	0.7%	83.1%
31	1219	7	0.7%	14.8%	92	1319	17	1.6%	84.7%
32	1221	9	0.9%	15.6%	93	1322	10	1.0%	85.7%
33	1223	8	0.8%	16.4%	94	1324	16	1.5%	87.3%
34	1225	6	0.6%	17.0%	95	1326	8	0.8%	88.0%
35	1227	14	1.4%	18.3%	96	1329	9	0.9%	88.9%
36	1229	6	0.6%	18.9%	97	1331	12	1.2%	90.1%
37	1231	12	1.2%	20.1%	98	1334	7	0.7%	90.7%
38	1233	9	0.9%	20.9%	99	1336	9	0.9%	91.6%
39	1234	13	1.3%	22.2%	100	1339	4	0.4%	92.0%
40	1236	11	1.1%	23.3%	101	1342	7	0.7%	92.7%
41	1238	16	1.5%	24.8%	102	1345	7	0.7%	93.3%
42	1239	9	0.9%	25.7%	103	1349	11	1.1%	94.4%
43	1241	5	0.5%	26.2%	104	1352	4	0.4%	94.8%
44	1243	11	1.1%	27.2%	105	1356	7	0.7%	95.5%
45	1244	4	0.4%	27.6%	106	1360	7	0.7%	96.1%
46	1246	12	1.2%	28.8%	107	1364	8	0.8%	96.9%
47	1247	10	1.0%	29.7%	108	1369	3	0.3%	97.2%
48	1249	10	1.0%	30.7%	109	1374	3	0.3%	97.5%
49	1250	8	0.8%	31.5%	110	1380	9	0.9%	98.4%
50	1252	14	1.4%	32.8%	111	1387	4	0.4%	98.7%
51	1254	11	1.1%	33.9%	112	1394	3	0.3%	99.0%
52	1255	9	0.9%	34.7%	113	1402	4	0.4%	99.4%
53	1256	15	1.4%	36.2%	114	1412	1	0.1%	99.5%
54	1258	7	0.7%	36.9%	115	1424	0	0.0%	99.5%
55	1259	15	1.4%	38.3%	116	1440	4	0.4%	99.9%
56	1261	4	0.4%	38.7%	117	1461	0	0.0%	99.9%
57	1262	16	1.5%	40.3%	118	1494	0	0.0%	99.9%
58	1264	15	1.4%	41.7%	119	1500	1	0.1%	100.0%
59	1265	14	1.4%	43.1%	120	1500	0	0.0%	100.0%
60	1267	5	0.5%	43.5%					

Table 8.1.1.12
2012 AIMS A Frequency Distribution Reading Grade 3

Raw	Scale	Freq	Percent	Cuml	Raw	Scale	Freq	Percent	Cuml
0	1000	31	3.3%	3.3%	61	1250	3	0.3%	34.4%
1	1000	3	0.3%	3.6%	62	1251	14	1.5%	35.8%
2	1011	1	0.1%	3.7%	63	1252	13	1.4%	37.2%
3	1048	0	0.0%	3.7%	64	1253	8	0.8%	38.1%
4	1073	3	0.3%	4.0%	65	1254	13	1.4%	39.4%
5	1091	1	0.1%	4.1%	66	1256	14	1.5%	40.9%
6	1105	0	0.0%	4.1%	67	1257	12	1.3%	42.2%
7	1116	0	0.0%	4.1%	68	1258	17	1.8%	44.0%
8	1126	6	0.6%	4.8%	69	1259	15	1.6%	45.6%
9	1134	1	0.1%	4.9%	70	1260	9	1.0%	46.5%
10	1141	0	0.0%	4.9%	71	1261	13	1.4%	47.9%
11	1147	0	0.0%	4.9%	72	1263	14	1.5%	49.4%
12	1153	12	1.3%	6.1%	73	1264	14	1.5%	50.8%
13	1157	0	0.0%	6.1%	74	1265	9	1.0%	51.8%
14	1162	2	0.2%	6.3%	75	1266	11	1.2%	53.0%
15	1166	2	0.2%	6.6%	76	1268	17	1.8%	54.8%
16	1170	7	0.7%	7.3%	77	1269	5	0.5%	55.3%
17	1174	3	0.3%	7.6%	78	1270	8	0.8%	56.1%
18	1177	0	0.0%	7.6%	79	1271	12	1.3%	57.4%
19	1180	2	0.2%	7.8%	80	1273	14	1.5%	58.9%
20	1183	8	0.8%	8.7%	81	1274	11	1.2%	60.0%
21	1186	3	0.3%	9.0%	82	1275	19	2.0%	62.1%
22	1188	4	0.4%	9.4%	83	1276	14	1.5%	63.5%
23	1191	3	0.3%	9.7%	84	1278	13	1.4%	64.9%
24	1193	4	0.4%	10.1%	85	1279	13	1.4%	66.3%
25	1196	6	0.6%	10.8%	86	1281	11	1.2%	67.4%
26	1198	3	0.3%	11.1%	87	1282	15	1.6%	69.0%
27	1200	7	0.7%	11.8%	88	1283	13	1.4%	70.4%
28	1202	3	0.3%	12.2%	89	1285	13	1.4%	71.8%
29	1204	0	0.0%	12.2%	90	1286	10	1.1%	72.8%
30	1206	5	0.5%	12.7%	91	1288	12	1.3%	74.1%
31	1208	2	0.2%	12.9%	92	1289	11	1.2%	75.3%
32	1210	4	0.4%	13.3%	93	1291	15	1.6%	76.8%
33	1211	6	0.6%	14.0%	94	1293	8	0.8%	77.7%
34	1213	8	0.8%	14.8%	95	1294	15	1.6%	79.3%
35	1215	5	0.5%	15.3%	96	1296	11	1.2%	80.4%
36	1216	5	0.5%	15.9%	97	1298	7	0.7%	81.2%
37	1218	2	0.2%	16.1%	98	1300	8	0.8%	82.0%
38	1220	9	1.0%	17.0%	99	1302	12	1.3%	83.3%
39	1221	7	0.7%	17.8%	100	1304	15	1.6%	84.9%
40	1223	7	0.7%	18.5%	101	1306	6	0.6%	85.5%
41	1224	3	0.3%	18.8%	102	1308	12	1.3%	86.8%
42	1225	3	0.3%	19.1%	103	1311	12	1.3%	88.1%
43	1227	2	0.2%	19.3%	104	1313	14	1.5%	89.5%
44	1228	5	0.5%	19.9%	105	1316	14	1.5%	91.0%
45	1230	4	0.4%	20.3%	106	1319	9	1.0%	92.0%
46	1231	18	1.9%	22.2%	107	1322	6	0.6%	92.6%
47	1232	7	0.7%	22.9%	108	1325	12	1.3%	93.9%
48	1234	7	0.7%	23.7%	109	1329	7	0.7%	94.6%
49	1235	7	0.7%	24.4%	110	1333	12	1.3%	95.9%
50	1236	5	0.5%	24.9%	111	1338	5	0.5%	96.4%
51	1237	10	1.1%	26.0%	112	1343	6	0.6%	97.0%
52	1239	11	1.2%	27.2%	113	1349	3	0.3%	97.4%
53	1240	7	0.7%	27.9%	114	1356	4	0.4%	97.8%
54	1241	4	0.4%	28.3%	115	1365	5	0.5%	98.3%
55	1242	6	0.6%	29.0%	116	1377	6	0.6%	98.9%
56	1244	10	1.1%	30.0%	117	1393	2	0.2%	99.2%
57	1245	9	1.0%	31.0%	118	1418	4	0.4%	99.6%
58	1246	7	0.7%	31.7%	119	1467	2	0.2%	99.8%
59	1247	10	1.1%	32.8%	120	1500	2	0.2%	100.0%
60	1248	12	1.3%	34.0%					

Table 8.1.1.13
2012 AIMS A Frequency Distribution Reading Grade 4

Raw	Scale	Freq	Percent	Cuml	Raw	Scale	Freq	Percent	Cuml
0	1000	36	3.8%	3.8%	61	1251	8	29.5%	29.5%
1	1000	1	4.0%	4.0%	62	1253	8	30.3%	30.3%
2	1000	0	4.0%	4.0%	63	1254	8	31.2%	31.2%
3	1004	1	4.1%	4.1%	64	1256	8	32.1%	32.1%
4	1034	3	4.4%	4.4%	65	1257	12	33.3%	33.3%
5	1056	1	4.5%	4.5%	66	1258	6	34.0%	34.0%
6	1074	1	4.6%	4.6%	67	1260	7	34.7%	34.7%
7	1088	1	4.7%	4.7%	68	1261	10	35.8%	35.8%
8	1100	6	5.3%	5.3%	69	1262	8	36.6%	36.6%
9	1111	1	5.4%	5.4%	70	1264	10	37.7%	37.7%
10	1119	5	6.0%	6.0%	71	1265	11	38.9%	38.9%
11	1127	0	6.0%	6.0%	72	1267	10	40.0%	40.0%
12	1134	9	6.9%	6.9%	73	1268	10	41.0%	41.0%
13	1141	0	6.9%	6.9%	74	1269	6	41.7%	41.7%
14	1146	1	7.1%	7.1%	75	1271	8	42.5%	42.5%
15	1151	1	7.2%	7.2%	76	1272	14	44.0%	44.0%
16	1156	2	7.4%	7.4%	77	1274	8	44.9%	44.9%
17	1161	1	7.5%	7.5%	78	1275	14	46.4%	46.4%
18	1165	0	7.5%	7.5%	79	1277	13	47.8%	47.8%
19	1169	1	7.6%	7.6%	80	1278	6	48.4%	48.4%
20	1172	5	8.1%	8.1%	81	1279	8	49.3%	49.3%
21	1176	1	8.2%	8.2%	82	1281	14	50.7%	50.7%
22	1179	2	8.4%	8.4%	83	1283	11	51.9%	51.9%
23	1182	2	8.7%	8.7%	84	1284	14	53.4%	53.4%
24	1185	6	9.3%	9.3%	85	1286	15	55.0%	55.0%
25	1188	2	9.5%	9.5%	86	1287	18	56.9%	56.9%
26	1190	4	9.9%	9.9%	87	1289	19	59.0%	59.0%
27	1193	3	10.3%	10.3%	88	1291	11	60.1%	60.1%
28	1195	3	10.6%	10.6%	89	1292	8	61.0%	61.0%
29	1198	2	10.8%	10.8%	90	1294	11	62.2%	62.2%
30	1200	2	11.0%	11.0%	91	1296	10	63.2%	63.2%
31	1202	5	11.5%	11.5%	92	1297	19	65.3%	65.3%
32	1204	4	12.0%	12.0%	93	1299	14	66.8%	66.8%
33	1207	1	12.1%	12.1%	94	1301	20	68.9%	68.9%
34	1209	2	12.3%	12.3%	95	1303	14	70.4%	70.4%
35	1211	7	13.0%	13.0%	96	1305	19	72.4%	72.4%
36	1212	3	13.4%	13.4%	97	1307	14	73.9%	73.9%
37	1214	3	13.7%	13.7%	98	1309	19	76.0%	76.0%
38	1216	8	14.5%	14.5%	99	1312	18	77.9%	77.9%
39	1218	6	15.2%	15.2%	100	1314	14	79.4%	79.4%
40	1220	1	15.3%	15.3%	101	1317	14	80.9%	80.9%
41	1221	3	15.6%	15.6%	102	1319	10	81.9%	81.9%
42	1223	3	15.9%	15.9%	103	1322	13	83.3%	83.3%
43	1225	5	16.5%	16.5%	104	1325	15	84.9%	84.9%
44	1226	5	17.0%	17.0%	105	1328	11	86.1%	86.1%
45	1228	5	17.5%	17.5%	106	1331	17	87.9%	87.9%
46	1230	8	18.4%	18.4%	107	1335	11	89.1%	89.1%
47	1231	6	19.0%	19.0%	108	1338	10	90.2%	90.2%
48	1233	2	19.2%	19.2%	109	1343	13	91.6%	91.6%
49	1234	7	20.0%	20.0%	110	1347	4	92.0%	92.0%
50	1236	5	20.5%	20.5%	111	1352	12	93.3%	93.3%
51	1237	2	20.7%	20.7%	112	1358	10	94.3%	94.3%
52	1239	7	21.5%	21.5%	113	1365	9	95.3%	95.3%
53	1240	8	22.3%	22.3%	114	1374	8	96.2%	96.2%
54	1242	4	22.8%	22.8%	115	1384	6	96.8%	96.8%
55	1243	6	23.4%	23.4%	116	1398	9	97.8%	97.8%
56	1244	5	23.9%	23.9%	117	1417	2	98.0%	98.0%
57	1246	13	25.3%	25.3%	118	1447	4	98.4%	98.4%
58	1247	9	26.3%	26.3%	119	1500	8	99.3%	99.3%
59	1249	14	27.8%	27.8%	120	1500	7	100.0%	100.0%
60	1250	8	28.6%	28.6%					

Table 8.1.1.14
2012 AIMS A Frequency Distribution Reading Grade 5

Raw	Scale	Freq	Percent	Cuml	Raw	Scale	Freq	Percent	Cuml
0	1000	28	3.1%	3.1%	61	1236	6	0.7%	26.2%
1	1000	1	0.1%	3.2%	62	1237	6	0.7%	26.9%
2	1000	2	0.2%	3.4%	63	1239	4	0.4%	27.3%
3	1000	1	0.1%	3.5%	64	1240	13	1.4%	28.7%
4	1000	4	0.4%	3.9%	65	1242	9	1.0%	29.7%
5	1016	0	0.0%	3.9%	66	1243	10	1.1%	30.8%
6	1035	1	0.1%	4.0%	67	1245	7	0.8%	31.6%
7	1050	0	0.0%	4.0%	68	1246	5	0.5%	32.1%
8	1063	6	0.7%	4.7%	69	1248	16	1.7%	33.8%
9	1074	0	0.0%	4.7%	70	1250	9	1.0%	34.8%
10	1084	3	0.3%	5.0%	71	1251	15	1.6%	36.5%
11	1092	1	0.1%	5.1%	72	1253	14	1.5%	38.0%
12	1100	3	0.3%	5.5%	73	1254	8	0.9%	38.9%
13	1107	2	0.2%	5.7%	74	1256	15	1.6%	40.5%
14	1113	3	0.3%	6.0%	75	1258	13	1.4%	41.9%
15	1119	2	0.2%	6.2%	76	1259	7	0.8%	42.7%
16	1125	4	0.4%	6.7%	77	1261	9	1.0%	43.7%
17	1130	2	0.2%	6.9%	78	1262	7	0.8%	44.4%
18	1134	2	0.2%	7.1%	79	1264	14	1.5%	46.0%
19	1139	1	0.1%	7.2%	80	1266	11	1.2%	47.2%
20	1143	6	0.7%	7.9%	81	1267	11	1.2%	48.4%
21	1147	2	0.2%	8.1%	82	1269	18	2.0%	50.3%
22	1151	0	0.0%	8.1%	83	1271	14	1.5%	51.9%
23	1154	3	0.3%	8.4%	84	1273	12	1.3%	53.2%
24	1158	7	0.8%	9.2%	85	1274	11	1.2%	54.4%
25	1161	2	0.2%	9.4%	86	1276	10	1.1%	55.5%
26	1164	1	0.1%	9.5%	87	1278	9	1.0%	56.4%
27	1167	0	0.0%	9.5%	88	1280	11	1.2%	57.6%
28	1170	2	0.2%	9.7%	89	1282	8	0.9%	58.5%
29	1173	2	0.2%	9.9%	90	1284	10	1.1%	59.6%
30	1176	2	0.2%	10.2%	91	1286	12	1.3%	60.9%
31	1178	3	0.3%	10.5%	92	1288	7	0.8%	61.7%
32	1181	5	0.5%	11.0%	93	1290	13	1.4%	63.1%
33	1183	1	0.1%	11.1%	94	1292	10	1.1%	64.2%
34	1186	5	0.5%	11.7%	95	1295	16	1.7%	65.9%
35	1188	3	0.3%	12.0%	96	1297	17	1.9%	67.8%
36	1190	3	0.3%	12.3%	97	1299	9	1.0%	68.8%
37	1193	4	0.4%	12.8%	98	1302	15	1.6%	70.4%
38	1195	4	0.4%	13.2%	99	1304	11	1.2%	71.6%
39	1197	6	0.7%	13.9%	100	1307	24	2.6%	74.2%
40	1199	2	0.2%	14.1%	101	1310	16	1.7%	76.0%
41	1201	1	0.1%	14.2%	102	1313	13	1.4%	77.4%
42	1203	2	0.2%	14.4%	103	1316	14	1.5%	78.9%
43	1205	2	0.2%	14.6%	104	1320	11	1.2%	80.1%
44	1207	5	0.5%	15.2%	105	1323	9	1.0%	81.1%
45	1209	3	0.3%	15.5%	106	1327	15	1.6%	82.8%
46	1210	2	0.2%	15.7%	107	1332	17	1.9%	84.6%
47	1212	7	0.8%	16.5%	108	1336	17	1.9%	86.5%
48	1214	4	0.4%	16.9%	109	1341	22	2.4%	88.9%
49	1216	4	0.4%	17.4%	110	1347	19	2.1%	90.9%
50	1217	6	0.7%	18.0%	111	1353	12	1.3%	92.2%
51	1219	8	0.9%	18.9%	112	1361	13	1.4%	93.7%
52	1221	5	0.5%	19.4%	113	1369	9	1.0%	94.7%
53	1223	5	0.5%	20.0%	114	1380	12	1.3%	96.0%
54	1224	5	0.5%	20.5%	115	1393	7	0.8%	96.7%
55	1226	1	0.1%	20.6%	116	1410	7	0.8%	97.5%
56	1228	7	0.8%	21.4%	117	1434	9	1.0%	98.5%
57	1229	8	0.9%	22.3%	118	1472	5	0.5%	99.0%
58	1231	10	1.1%	23.4%	119	1500	3	0.3%	99.3%
59	1232	10	1.1%	24.5%	120	1500	6	0.7%	100.0%
60	1234	10	1.1%	25.5%					

Table 8.1.1.15
2012 AIMS A Frequency Distribution Reading Grade 6

Raw	Scale	Freq	Percent	Cuml	Raw	Scale	Freq	Percent	Cuml
0	1000	28	2.8%	2.8%	61	1236	1	0.1%	25.2%
1	1000	1	0.1%	2.9%	62	1238	4	0.4%	25.6%
2	1000	3	0.3%	3.2%	63	1239	10	1.0%	26.6%
3	1000	1	0.1%	3.3%	64	1241	16	1.6%	28.2%
4	1000	5	0.5%	3.8%	65	1243	5	0.5%	28.7%
5	1008	0	0.0%	3.8%	66	1244	11	1.1%	29.8%
6	1029	2	0.2%	4.0%	67	1246	13	1.3%	31.1%
7	1045	1	0.1%	4.1%	68	1248	4	0.4%	31.5%
8	1059	4	0.4%	4.5%	69	1249	12	1.2%	32.7%
9	1071	0	0.0%	4.5%	70	1251	16	1.6%	34.3%
10	1081	0	0.0%	4.5%	71	1253	7	0.7%	35.0%
11	1090	1	0.1%	4.6%	72	1255	4	0.4%	35.4%
12	1098	8	0.8%	5.4%	73	1256	8	0.8%	36.2%
13	1105	1	0.1%	5.5%	74	1258	9	0.9%	37.1%
14	1111	2	0.2%	5.7%	75	1260	8	0.8%	37.9%
15	1118	3	0.3%	6.0%	76	1262	3	0.3%	38.2%
16	1123	4	0.4%	6.4%	77	1263	5	0.5%	38.7%
17	1128	5	0.5%	6.9%	78	1265	7	0.7%	39.4%
18	1133	1	0.1%	7.0%	79	1267	7	0.7%	40.1%
19	1138	1	0.1%	7.1%	80	1269	6	0.6%	40.7%
20	1142	12	1.2%	8.3%	81	1271	4	0.4%	41.1%
21	1146	4	0.4%	8.7%	82	1273	11	1.1%	42.2%
22	1150	1	0.1%	8.8%	83	1275	12	1.2%	43.4%
23	1153	0	0.0%	8.8%	84	1277	8	0.8%	44.2%
24	1157	4	0.4%	9.2%	85	1279	15	1.5%	45.7%
25	1160	3	0.3%	9.5%	86	1281	7	0.7%	46.4%
26	1163	1	0.1%	9.6%	87	1283	6	0.6%	47.0%
27	1166	3	0.3%	9.9%	88	1285	7	0.7%	47.7%
28	1169	4	0.4%	10.3%	89	1287	15	1.5%	49.2%
29	1172	4	0.4%	10.7%	90	1289	11	1.1%	50.2%
30	1174	4	0.4%	11.1%	91	1292	16	1.6%	51.8%
31	1177	4	0.4%	11.5%	92	1294	10	1.0%	52.8%
32	1180	4	0.4%	11.9%	93	1296	13	1.3%	54.1%
33	1182	1	0.1%	12.0%	94	1299	14	1.4%	55.5%
34	1185	1	0.1%	12.1%	95	1301	10	1.0%	56.5%
35	1187	6	0.6%	12.7%	96	1304	15	1.5%	58.0%
36	1189	1	0.1%	12.8%	97	1307	16	1.6%	59.6%
37	1191	1	0.1%	12.9%	98	1310	14	1.4%	61.0%
38	1194	2	0.2%	13.1%	99	1313	22	2.2%	63.2%
39	1196	4	0.4%	13.5%	100	1316	16	1.6%	64.8%
40	1198	4	0.4%	13.9%	101	1319	13	1.3%	66.1%
41	1200	6	0.6%	14.5%	102	1322	17	1.7%	67.8%
42	1202	6	0.6%	15.1%	103	1326	22	2.2%	70.0%
43	1204	4	0.4%	15.5%	104	1330	13	1.3%	71.3%
44	1206	5	0.5%	16.0%	105	1334	15	1.5%	72.8%
45	1208	5	0.5%	16.5%	106	1338	22	2.2%	75.0%
46	1210	5	0.5%	16.9%	107	1343	18	1.8%	76.8%
47	1211	3	0.3%	17.2%	108	1348	25	2.5%	79.3%
48	1213	2	0.2%	17.4%	109	1353	15	1.5%	80.8%
49	1215	3	0.3%	17.7%	110	1360	29	2.9%	83.6%
50	1217	5	0.5%	18.2%	111	1366	26	2.6%	86.2%
51	1219	8	0.8%	19.0%	112	1374	20	2.0%	88.2%
52	1221	4	0.4%	19.4%	113	1383	19	1.9%	90.1%
53	1222	7	0.7%	20.1%	114	1394	18	1.8%	91.9%
54	1224	6	0.6%	20.7%	115	1408	16	1.6%	93.5%
55	1226	5	0.5%	21.2%	116	1425	18	1.8%	95.3%
56	1227	7	0.7%	21.9%	117	1450	8	0.8%	96.1%
57	1229	9	0.9%	22.8%	118	1490	16	1.6%	97.7%
58	1231	6	0.6%	23.4%	119	1500	15	1.5%	99.2%
59	1233	8	0.8%	24.2%	120	1500	8	0.8%	100.0%
60	1234	9	0.9%	25.1%					

Table 8.1.1.16
2012 AIMS A Frequency Distribution Reading Grade 7

Raw	Scale	Freq	Percent	Cuml	Raw	Scale	Freq	Percent	Cuml
0	1000	29	3.1%	3.1%	61	1236	14	1.5%	24.9%
1	1000	0	0.0%	3.1%	62	1238	4	0.4%	25.3%
2	1000	0	0.0%	3.1%	63	1239	4	0.4%	25.7%
3	1000	2	0.2%	3.3%	64	1241	7	0.7%	26.5%
4	1000	3	0.3%	3.6%	65	1243	4	0.4%	26.9%
5	1009	1	0.1%	3.7%	66	1244	6	0.6%	27.5%
6	1030	0	0.0%	3.7%	67	1246	9	1.0%	28.5%
7	1046	1	0.1%	3.8%	68	1248	5	0.5%	29.0%
8	1060	2	0.2%	4.0%	69	1249	7	0.7%	29.8%
9	1072	1	0.1%	4.1%	70	1251	8	0.8%	30.6%
10	1082	1	0.1%	4.2%	71	1253	3	0.3%	30.9%
11	1091	0	0.0%	4.2%	72	1255	6	0.6%	31.6%
12	1099	3	0.3%	4.6%	73	1256	6	0.6%	32.2%
13	1106	3	0.3%	4.9%	74	1258	7	0.7%	32.9%
14	1112	2	0.2%	5.1%	75	1260	9	1.0%	33.9%
15	1118	2	0.2%	5.3%	76	1262	9	1.0%	34.9%
16	1124	2	0.2%	5.5%	77	1263	6	0.6%	35.5%
17	1129	2	0.2%	5.7%	78	1265	7	0.7%	36.2%
18	1134	1	0.1%	5.8%	79	1267	9	1.0%	37.2%
19	1138	3	0.3%	6.1%	80	1269	10	1.1%	38.2%
20	1142	7	0.7%	6.9%	81	1271	12	1.3%	39.5%
21	1146	1	0.1%	7.0%	82	1273	3	0.3%	39.8%
22	1150	2	0.2%	7.2%	83	1275	8	0.8%	40.7%
23	1154	4	0.4%	7.6%	84	1276	13	1.4%	42.1%
24	1157	5	0.5%	8.2%	85	1278	14	1.5%	43.5%
25	1160	3	0.3%	8.5%	86	1281	8	0.8%	44.4%
26	1163	3	0.3%	8.8%	87	1283	7	0.7%	45.1%
27	1166	2	0.2%	9.0%	88	1285	9	1.0%	46.1%
28	1169	8	0.8%	9.9%	89	1287	13	1.4%	47.5%
29	1172	3	0.3%	10.2%	90	1289	4	0.4%	47.9%
30	1175	0	0.0%	10.2%	91	1291	10	1.1%	48.9%
31	1177	1	0.1%	10.3%	92	1294	4	0.4%	49.4%
32	1180	5	0.5%	10.8%	93	1296	15	1.6%	51.0%
33	1182	3	0.3%	11.1%	94	1298	5	0.5%	51.5%
34	1185	1	0.1%	11.2%	95	1301	17	1.8%	53.3%
35	1187	4	0.4%	11.7%	96	1304	18	1.9%	55.2%
36	1189	2	0.2%	11.9%	97	1306	8	0.8%	56.0%
37	1191	5	0.5%	12.4%	98	1309	17	1.8%	57.8%
38	1193	3	0.3%	12.7%	99	1312	18	1.9%	59.7%
39	1196	3	0.3%	13.0%	100	1315	12	1.3%	61.0%
40	1198	3	0.3%	13.3%	101	1318	18	1.9%	62.9%
41	1200	2	0.2%	13.6%	102	1322	15	1.6%	64.5%
42	1202	4	0.4%	14.0%	103	1325	9	1.0%	65.5%
43	1204	7	0.7%	14.7%	104	1329	15	1.6%	67.1%
44	1206	4	0.4%	15.1%	105	1333	13	1.4%	68.4%
45	1208	0	0.0%	15.1%	106	1337	26	2.8%	71.2%
46	1209	2	0.2%	15.4%	107	1341	17	1.8%	73.0%
47	1211	4	0.4%	15.8%	108	1346	24	2.5%	75.5%
48	1213	6	0.6%	16.4%	109	1352	17	1.8%	77.3%
49	1215	4	0.4%	16.8%	110	1357	26	2.8%	80.1%
50	1217	2	0.2%	17.1%	111	1364	19	2.0%	82.1%
51	1219	8	0.8%	17.9%	112	1371	35	3.7%	85.8%
52	1220	8	0.8%	18.8%	113	1379	19	2.0%	87.8%
53	1222	3	0.3%	19.1%	114	1389	19	2.0%	89.8%
54	1224	3	0.3%	19.4%	115	1401	22	2.3%	92.2%
55	1226	7	0.7%	20.1%	116	1416	28	3.0%	95.1%
56	1227	5	0.5%	20.7%	117	1437	3	0.3%	95.4%
57	1229	8	0.8%	21.5%	118	1471	11	1.2%	96.6%
58	1231	9	1.0%	22.5%	119	1500	18	1.9%	98.5%
59	1232	4	0.4%	22.9%	120	1500	14	1.5%	100.0%
60	1234	5	0.5%	23.4%					

Table 8.1.1.17
2012 AIMS A Frequency Distribution Reading Grade 8

Raw	Scale	Freq	Percent	Cuml	Raw	Scale	Freq	Percent	Cuml
0	1000	34	3.7%	3.7%	61	1251	6	0.7%	24.5%
1	1000	4	0.4%	4.2%	62	1252	9	1.0%	25.5%
2	1000	1	0.1%	4.3%	63	1254	12	1.3%	26.8%
3	1035	1	0.1%	4.4%	64	1255	8	0.9%	27.7%
4	1061	3	0.3%	4.7%	65	1256	2	0.2%	27.9%
5	1080	0	0.0%	4.7%	66	1258	10	1.1%	29.0%
6	1095	1	0.1%	4.8%	67	1259	8	0.9%	29.9%
7	1106	0	0.0%	4.8%	68	1260	10	1.1%	31.0%
8	1116	6	0.7%	5.5%	69	1262	6	0.7%	31.7%
9	1125	0	0.0%	5.5%	70	1263	11	1.2%	32.9%
10	1132	0	0.0%	5.5%	71	1264	9	1.0%	33.8%
11	1139	0	0.0%	5.5%	72	1266	8	0.9%	34.7%
12	1144	1	0.1%	5.6%	73	1267	15	1.6%	36.4%
13	1150	2	0.2%	5.8%	74	1269	15	1.6%	38.0%
14	1154	1	0.1%	5.9%	75	1270	12	1.3%	39.3%
15	1159	1	0.1%	6.0%	76	1271	5	0.5%	39.9%
16	1163	1	0.1%	6.1%	77	1273	9	1.0%	40.9%
17	1166	1	0.1%	6.2%	78	1274	7	0.8%	41.6%
18	1170	2	0.2%	6.5%	79	1275	12	1.3%	42.9%
19	1173	2	0.2%	6.7%	80	1277	10	1.1%	44.0%
20	1176	2	0.2%	6.9%	81	1278	13	1.4%	45.5%
21	1179	3	0.3%	7.2%	82	1280	13	1.4%	46.9%
22	1182	2	0.2%	7.4%	83	1281	10	1.1%	48.0%
23	1185	1	0.1%	7.6%	84	1283	14	1.5%	49.5%
24	1187	4	0.4%	8.0%	85	1284	10	1.1%	50.6%
25	1190	3	0.3%	8.3%	86	1286	9	1.0%	51.6%
26	1192	4	0.4%	8.8%	87	1287	17	1.9%	53.5%
27	1195	3	0.3%	9.1%	88	1289	11	1.2%	54.7%
28	1197	3	0.3%	9.4%	89	1290	14	1.5%	56.2%
29	1199	3	0.3%	9.7%	90	1292	7	0.8%	57.0%
30	1201	2	0.2%	10.0%	91	1293	11	1.2%	58.2%
31	1203	4	0.4%	10.4%	92	1295	14	1.5%	59.7%
32	1205	2	0.2%	10.6%	93	1297	12	1.3%	61.0%
33	1207	2	0.2%	10.8%	94	1299	15	1.6%	62.7%
34	1209	2	0.2%	11.1%	95	1301	10	1.1%	63.7%
35	1211	3	0.3%	11.4%	96	1302	11	1.2%	65.0%
36	1213	4	0.4%	11.8%	97	1304	14	1.5%	66.5%
37	1215	2	0.2%	12.0%	98	1306	9	1.0%	67.5%
38	1216	5	0.5%	12.6%	99	1308	17	1.9%	69.3%
39	1218	2	0.2%	12.8%	100	1311	13	1.4%	70.8%
40	1220	3	0.3%	13.1%	101	1313	8	0.9%	71.6%
41	1221	1	0.1%	13.3%	102	1315	7	0.8%	72.4%
42	1223	5	0.5%	13.8%	103	1318	8	0.9%	73.3%
43	1225	3	0.3%	14.1%	104	1320	14	1.5%	74.8%
44	1226	0	0.0%	14.1%	105	1323	20	2.2%	77.0%
45	1228	3	0.3%	14.5%	106	1326	12	1.3%	78.3%
46	1229	9	1.0%	15.4%	107	1329	11	1.2%	79.5%
47	1231	9	1.0%	16.4%	108	1333	23	2.5%	82.0%
48	1233	2	0.2%	16.6%	109	1337	12	1.3%	83.4%
49	1234	3	0.3%	17.0%	110	1341	23	2.5%	85.9%
50	1236	2	0.2%	17.2%	111	1346	11	1.2%	87.1%
51	1237	6	0.7%	17.9%	112	1351	15	1.6%	88.7%
52	1238	5	0.5%	18.4%	113	1357	11	1.2%	89.9%
53	1240	5	0.5%	18.9%	114	1364	14	1.5%	91.5%
54	1241	5	0.5%	19.5%	115	1373	16	1.8%	93.2%
55	1243	8	0.9%	20.4%	116	1385	11	1.2%	94.4%
56	1244	5	0.5%	20.9%	117	1401	6	0.7%	95.1%
57	1246	14	1.5%	22.5%	118	1427	15	1.6%	96.7%
58	1247	7	0.8%	23.2%	119	1481	17	1.9%	98.6%
59	1248	1	0.1%	23.3%	120	1500	13	1.4%	100.0%
60	1250	5	0.5%	23.9%					

Table 8.1.1.18
2012 AIMS A Frequency Distribution Reading High School

Raw	Scale	Freq	Percent	Cuml	Raw	Scale	Freq	Percent	Cuml
0	1000	27	2.6%	2.6%	61	1248	6	0.6%	24.9%
1	1000	1	0.1%	2.7%	62	1249	7	0.7%	25.6%
2	1025	1	0.1%	2.8%	63	1251	6	0.6%	26.2%
3	1061	1	0.1%	2.9%	64	1252	8	0.8%	26.9%
4	1085	11	1.1%	4.0%	65	1253	4	0.4%	27.3%
5	1102	0	0.0%	4.0%	66	1254	9	0.9%	28.2%
6	1115	0	0.0%	4.0%	67	1255	9	0.9%	29.1%
7	1125	0	0.0%	4.0%	68	1257	9	0.9%	29.9%
8	1134	7	0.7%	4.6%	69	1258	5	0.5%	30.4%
9	1141	0	0.0%	4.6%	70	1259	9	0.9%	31.3%
10	1147	0	0.0%	4.6%	71	1260	7	0.7%	31.9%
11	1153	1	0.1%	4.7%	72	1261	4	0.4%	32.3%
12	1158	10	1.0%	5.7%	73	1263	9	0.9%	33.2%
13	1162	2	0.2%	5.9%	74	1264	4	0.4%	33.6%
14	1166	4	0.4%	6.3%	75	1265	5	0.5%	34.1%
15	1170	1	0.1%	6.4%	76	1266	11	1.1%	35.1%
16	1173	2	0.2%	6.6%	77	1268	3	0.3%	35.4%
17	1177	2	0.2%	6.8%	78	1269	6	0.6%	36.0%
18	1180	2	0.2%	6.9%	79	1270	10	1.0%	37.0%
19	1182	3	0.3%	7.2%	80	1271	6	0.6%	37.5%
20	1185	8	0.8%	8.0%	81	1273	10	1.0%	38.5%
21	1188	3	0.3%	8.3%	82	1274	7	0.7%	39.2%
22	1190	3	0.3%	8.6%	83	1276	5	0.5%	39.7%
23	1192	4	0.4%	9.0%	84	1277	8	0.8%	40.4%
24	1194	2	0.2%	9.2%	85	1278	11	1.1%	41.5%
25	1197	2	0.2%	9.4%	86	1280	9	0.9%	42.4%
26	1199	4	0.4%	9.7%	87	1281	6	0.6%	43.0%
27	1201	3	0.3%	10.0%	88	1283	6	0.6%	43.5%
28	1202	3	0.3%	10.3%	89	1284	11	1.1%	44.6%
29	1204	2	0.2%	10.5%	90	1286	10	1.0%	45.6%
30	1206	7	0.7%	11.2%	91	1287	13	1.3%	46.8%
31	1208	4	0.4%	11.6%	92	1289	11	1.1%	47.9%
32	1210	6	0.6%	12.2%	93	1291	9	0.9%	48.7%
33	1211	5	0.5%	12.6%	94	1292	7	0.7%	49.4%
34	1213	2	0.2%	12.8%	95	1294	12	1.2%	50.6%
35	1214	4	0.4%	13.2%	96	1296	9	0.9%	51.4%
36	1216	5	0.5%	13.7%	97	1298	18	1.7%	53.2%
37	1217	2	0.2%	13.9%	98	1300	11	1.1%	54.2%
38	1219	4	0.4%	14.3%	99	1302	9	0.9%	55.1%
39	1220	6	0.6%	14.9%	100	1304	10	1.0%	56.1%
40	1222	4	0.4%	15.3%	101	1306	8	0.8%	56.9%
41	1223	4	0.4%	15.6%	102	1309	9	0.9%	57.7%
42	1225	1	0.1%	15.7%	103	1311	20	1.9%	59.7%
43	1226	1	0.1%	15.8%	104	1314	21	2.0%	61.7%
44	1227	5	0.5%	16.3%	105	1317	15	1.4%	63.1%
45	1229	4	0.4%	16.7%	106	1320	17	1.6%	64.8%
46	1230	2	0.2%	16.9%	107	1323	26	2.5%	67.3%
47	1231	4	0.4%	17.3%	108	1327	23	2.2%	69.5%
48	1232	4	0.4%	17.7%	109	1331	13	1.3%	70.8%
49	1234	6	0.6%	18.2%	110	1335	25	2.4%	73.2%
50	1235	7	0.7%	18.9%	111	1340	18	1.7%	74.9%
51	1236	4	0.4%	19.3%	112	1345	31	3.0%	77.9%
52	1237	7	0.7%	20.0%	113	1352	22	2.1%	80.0%
53	1239	4	0.4%	20.4%	114	1359	24	2.3%	82.3%
54	1240	7	0.7%	21.0%	115	1369	33	3.2%	85.5%
55	1241	3	0.3%	21.3%	116	1381	31	3.0%	88.5%
56	1242	6	0.6%	21.9%	117	1398	21	2.0%	90.5%
57	1243	7	0.7%	22.6%	118	1425	22	2.1%	92.7%
58	1245	11	1.1%	23.6%	119	1478	30	2.9%	95.6%
59	1246	3	0.3%	23.9%	120	1500	46	4.4%	100.0%
60	1247	4	0.4%	24.3%					

Table 8.1.1.19
2012 AIMS A Frequency Distribution Science Grade 4

Raw	Scale	Freq	Percent	Cuml	Raw	Scale	Freq	Percent	Cuml
0	1000	34	3.6%	3.6%	61	1248	4	0.4%	26.7%
1	1000	1	0.1%	3.7%	62	1250	8	0.9%	27.6%
2	1000	1	0.1%	3.8%	63	1251	4	0.4%	28.0%
3	1032	0	0.0%	3.8%	64	1252	6	0.6%	28.6%
4	1059	8	0.9%	4.7%	65	1253	5	0.5%	29.2%
5	1079	0	0.0%	4.7%	66	1255	7	0.7%	29.9%
6	1095	0	0.0%	4.7%	67	1256	3	0.3%	30.2%
7	1108	1	0.1%	4.8%	68	1257	6	0.6%	30.9%
8	1119	3	0.3%	5.1%	69	1258	8	0.9%	31.7%
9	1128	0	0.0%	5.1%	70	1259	9	1.0%	32.7%
10	1135	0	0.0%	5.1%	71	1261	7	0.7%	33.4%
11	1142	0	0.0%	5.1%	72	1262	9	1.0%	34.4%
12	1148	9	1.0%	6.1%	73	1263	6	0.6%	35.0%
13	1154	0	0.0%	6.1%	74	1265	11	1.2%	36.2%
14	1159	1	0.1%	6.2%	75	1266	9	1.0%	37.2%
15	1163	1	0.1%	6.3%	76	1267	7	0.7%	37.9%
16	1167	4	0.4%	6.7%	77	1268	10	1.1%	39.0%
17	1171	0	0.0%	6.7%	78	1270	6	0.6%	39.6%
18	1174	2	0.2%	6.9%	79	1271	9	1.0%	40.6%
19	1178	0	0.0%	6.9%	80	1272	13	1.4%	42.0%
20	1181	8	0.9%	7.8%	81	1274	7	0.7%	42.7%
21	1184	2	0.2%	8.0%	82	1275	4	0.4%	43.2%
22	1186	2	0.2%	8.2%	83	1277	7	0.7%	43.9%
23	1189	1	0.1%	8.3%	84	1278	10	1.1%	45.0%
24	1191	6	0.6%	9.0%	85	1280	4	0.4%	45.4%
25	1194	0	0.0%	9.0%	86	1281	7	0.7%	46.2%
26	1196	1	0.1%	9.1%	87	1283	3	0.3%	46.5%
27	1198	1	0.1%	9.2%	88	1284	9	1.0%	47.4%
28	1200	5	0.5%	9.7%	89	1286	15	1.6%	49.0%
29	1202	2	0.2%	9.9%	90	1287	3	0.3%	49.4%
30	1204	2	0.2%	10.1%	91	1289	9	1.0%	50.3%
31	1206	2	0.2%	10.4%	92	1291	13	1.4%	51.7%
32	1208	3	0.3%	10.7%	93	1292	11	1.2%	52.9%
33	1210	1	0.1%	10.8%	94	1294	19	2.0%	54.9%
34	1211	5	0.5%	11.3%	95	1296	21	2.2%	57.2%
35	1213	7	0.7%	12.1%	96	1298	15	1.6%	58.8%
36	1215	4	0.4%	12.5%	97	1300	7	0.7%	59.5%
37	1216	2	0.2%	12.7%	98	1302	22	2.4%	61.9%
38	1218	3	0.3%	13.0%	99	1304	12	1.3%	63.1%
39	1219	6	0.6%	13.7%	100	1306	16	1.7%	64.9%
40	1221	7	0.7%	14.4%	101	1309	18	1.9%	66.8%
41	1222	2	0.2%	14.6%	102	1311	16	1.7%	68.5%
42	1224	4	0.4%	15.1%	103	1314	16	1.7%	70.2%
43	1225	9	1.0%	16.0%	104	1317	20	2.1%	72.3%
44	1227	3	0.3%	16.3%	105	1319	20	2.1%	74.5%
45	1228	3	0.3%	16.7%	106	1323	18	1.9%	76.4%
46	1229	1	0.1%	16.8%	107	1326	28	3.0%	79.4%
47	1231	7	0.7%	17.5%	108	1330	27	2.9%	82.3%
48	1232	5	0.5%	18.1%	109	1334	20	2.1%	84.4%
49	1233	5	0.5%	18.6%	110	1338	17	1.8%	86.2%
50	1235	6	0.6%	19.2%	111	1343	19	2.0%	88.2%
51	1236	7	0.7%	20.0%	112	1349	21	2.2%	90.5%
52	1237	3	0.3%	20.3%	113	1356	11	1.2%	91.7%
53	1238	6	0.6%	20.9%	114	1364	19	2.0%	93.7%
54	1240	3	0.3%	21.3%	115	1374	14	1.5%	95.2%
55	1241	9	1.0%	22.2%	116	1386	13	1.4%	96.6%
56	1242	5	0.5%	22.8%	117	1404	7	0.7%	97.3%
57	1243	7	0.7%	23.5%	118	1433	11	1.2%	98.5%
58	1245	10	1.1%	24.6%	119	1489	9	1.0%	99.5%
59	1246	9	1.0%	25.5%	120	1500	5	0.5%	100.0%
60	1247	7	0.7%	26.3%					

Table 8.1.1.20
2012 AIMS A Frequency Distribution Science Grade 8

Raw	Scale	Freq	Percent	Cuml	Raw	Scale	Freq	Percent	Cuml
0	1000	35	3.8%	3.8%	61	1254	6	0.7%	28.1%
1	1000	3	0.3%	4.2%	62	1255	4	0.4%	28.6%
2	1018	2	0.2%	4.4%	63	1257	15	1.6%	30.2%
3	1051	0	0.0%	4.4%	64	1258	11	1.2%	31.4%
4	1074	4	0.4%	4.8%	65	1259	13	1.4%	32.9%
5	1092	2	0.2%	5.0%	66	1260	6	0.7%	33.5%
6	1106	1	0.1%	5.1%	67	1261	7	0.8%	34.3%
7	1117	0	0.0%	5.1%	68	1262	11	1.2%	35.5%
8	1127	4	0.4%	5.6%	69	1263	4	0.4%	35.9%
9	1135	1	0.1%	5.7%	70	1264	9	1.0%	36.9%
10	1142	0	0.0%	5.7%	71	1265	7	0.8%	37.7%
11	1149	2	0.2%	5.9%	72	1266	12	1.3%	39.0%
12	1155	0	0.0%	5.9%	73	1267	8	0.9%	39.9%
13	1160	0	0.0%	5.9%	74	1269	9	1.0%	40.9%
14	1165	1	0.1%	6.0%	75	1270	15	1.6%	42.5%
15	1169	2	0.2%	6.2%	76	1271	7	0.8%	43.3%
16	1173	3	0.3%	6.6%	77	1272	5	0.5%	43.8%
17	1177	2	0.2%	6.8%	78	1273	10	1.1%	44.9%
18	1181	0	0.0%	6.8%	79	1274	7	0.8%	45.7%
19	1184	0	0.0%	6.8%	80	1275	10	1.1%	46.8%
20	1187	2	0.2%	7.0%	81	1276	17	1.9%	48.6%
21	1190	2	0.2%	7.2%	82	1278	4	0.4%	49.1%
22	1193	4	0.4%	7.7%	83	1279	5	0.5%	49.6%
23	1196	2	0.2%	7.9%	84	1280	9	1.0%	50.6%
24	1198	3	0.3%	8.2%	85	1281	7	0.8%	51.4%
25	1201	1	0.1%	8.3%	86	1282	5	0.5%	51.9%
26	1203	1	0.1%	8.4%	87	1284	12	1.3%	53.2%
27	1205	3	0.3%	8.8%	88	1285	6	0.7%	53.9%
28	1207	5	0.5%	9.3%	89	1286	12	1.3%	55.2%
29	1209	2	0.2%	9.5%	90	1287	12	1.3%	56.5%
30	1211	5	0.5%	10.1%	91	1289	14	1.5%	58.1%
31	1213	5	0.5%	10.6%	92	1290	8	0.9%	58.9%
32	1215	3	0.3%	11.0%	93	1292	12	1.3%	60.2%
33	1217	7	0.8%	11.7%	94	1293	14	1.5%	61.8%
34	1219	6	0.7%	12.4%	95	1294	14	1.5%	63.3%
35	1220	4	0.4%	12.8%	96	1296	11	1.2%	64.5%
36	1222	2	0.2%	13.0%	97	1298	9	1.0%	65.5%
37	1224	2	0.2%	13.3%	98	1299	10	1.1%	66.6%
38	1225	1	0.1%	13.4%	99	1301	16	1.8%	68.3%
39	1227	2	0.2%	13.6%	100	1303	12	1.3%	69.7%
40	1228	6	0.7%	14.2%	101	1305	14	1.5%	71.2%
41	1230	4	0.4%	14.7%	102	1306	10	1.1%	72.3%
42	1231	3	0.3%	15.0%	103	1308	12	1.3%	73.6%
43	1233	6	0.7%	15.7%	104	1311	17	1.9%	75.5%
44	1234	7	0.8%	16.4%	105	1313	9	1.0%	76.5%
45	1235	5	0.5%	17.0%	106	1315	13	1.4%	77.9%
46	1237	4	0.4%	17.4%	107	1318	22	2.4%	80.3%
47	1238	4	0.4%	17.9%	108	1321	21	2.3%	82.6%
48	1239	6	0.7%	18.5%	109	1324	15	1.6%	84.2%
49	1240	5	0.5%	19.1%	110	1327	18	2.0%	86.2%
50	1242	4	0.4%	19.5%	111	1331	21	2.3%	88.5%
51	1243	11	1.2%	20.7%	112	1335	21	2.3%	90.8%
52	1244	7	0.8%	21.5%	113	1340	9	1.0%	91.8%
53	1245	5	0.5%	22.0%	114	1346	13	1.4%	93.2%
54	1246	3	0.3%	22.3%	115	1354	12	1.3%	94.5%
55	1248	8	0.9%	23.2%	116	1363	16	1.8%	96.3%
56	1249	5	0.5%	23.8%	117	1377	6	0.7%	96.9%
57	1250	8	0.9%	24.6%	118	1398	5	0.5%	97.5%
58	1251	6	0.7%	25.3%	119	1442	9	1.0%	98.5%
59	1252	10	1.1%	26.4%	120	1500	14	1.5%	100.0%
60	1253	10	1.1%	27.5%					

Table 8.1.1.21
2012 AIMS A Frequency Distribution Science Grade 10

Raw	Scale	Freq	Percent	Cuml	Raw	Scale	Freq	Percent	Cuml
0	1000	28	3.3%	3.3%	61	1246	3	0.4%	24.9%
1	1015	3	0.4%	3.6%	62	1247	3	0.4%	25.3%
2	1066	1	0.1%	3.7%	63	1247	7	0.8%	26.1%
3	1094	0	0.0%	3.7%	64	1248	8	0.9%	27.0%
4	1113	6	0.7%	4.4%	65	1249	6	0.7%	27.7%
5	1126	0	0.0%	4.4%	66	1250	5	0.6%	28.3%
6	1137	4	0.5%	4.9%	67	1251	2	0.2%	28.5%
7	1146	1	0.1%	5.0%	68	1252	7	0.8%	29.4%
8	1153	4	0.5%	5.5%	69	1253	3	0.4%	29.7%
9	1159	2	0.2%	5.7%	70	1254	8	0.9%	30.6%
10	1164	0	0.0%	5.7%	71	1255	4	0.5%	31.1%
11	1168	1	0.1%	5.8%	72	1256	12	1.4%	32.5%
12	1173	3	0.4%	6.2%	73	1257	7	0.8%	33.3%
13	1176	0	0.0%	6.2%	74	1258	5	0.6%	33.9%
14	1180	4	0.5%	6.7%	75	1259	6	0.7%	34.6%
15	1183	1	0.1%	6.8%	76	1260	6	0.7%	35.3%
16	1185	4	0.5%	7.3%	77	1261	3	0.4%	35.7%
17	1188	1	0.1%	7.4%	78	1262	7	0.8%	36.5%
18	1191	1	0.1%	7.5%	79	1263	8	0.9%	37.4%
19	1193	1	0.1%	7.6%	80	1264	6	0.7%	38.1%
20	1195	6	0.7%	8.3%	81	1265	10	1.2%	39.3%
21	1197	1	0.1%	8.4%	82	1266	7	0.8%	40.1%
22	1199	1	0.1%	8.5%	83	1267	8	0.9%	41.1%
23	1201	0	0.0%	8.5%	84	1268	7	0.8%	41.9%
24	1203	3	0.4%	8.9%	85	1269	9	1.1%	42.9%
25	1204	1	0.1%	9.0%	86	1270	17	2.0%	44.9%
26	1206	1	0.1%	9.1%	87	1271	11	1.3%	46.2%
27	1208	0	0.0%	9.1%	88	1272	8	0.9%	47.1%
28	1209	6	0.7%	9.8%	89	1274	11	1.3%	48.4%
29	1211	3	0.4%	10.2%	90	1275	13	1.5%	49.9%
30	1212	2	0.2%	10.4%	91	1276	13	1.5%	51.5%
31	1214	7	0.8%	11.2%	92	1277	12	1.4%	52.9%
32	1215	5	0.6%	11.8%	93	1278	6	0.7%	53.6%
33	1216	3	0.4%	12.2%	94	1280	15	1.8%	55.3%
34	1217	3	0.4%	12.5%	95	1281	8	0.9%	56.3%
35	1219	2	0.2%	12.7%	96	1283	15	1.8%	58.0%
36	1220	3	0.4%	13.1%	97	1284	11	1.3%	59.3%
37	1221	3	0.4%	13.5%	98	1285	18	2.1%	61.4%
38	1222	1	0.1%	13.6%	99	1287	13	1.5%	62.9%
39	1224	8	0.9%	14.5%	100	1289	14	1.6%	64.6%
40	1225	5	0.6%	15.1%	101	1290	12	1.4%	66.0%
41	1226	5	0.6%	15.7%	102	1292	18	2.1%	68.1%
42	1227	3	0.4%	16.0%	103	1294	22	2.6%	70.6%
43	1228	4	0.5%	16.5%	104	1296	12	1.4%	72.0%
44	1229	3	0.4%	16.8%	105	1298	23	2.7%	74.7%
45	1230	3	0.4%	17.2%	106	1300	14	1.6%	76.4%
46	1231	7	0.8%	18.0%	107	1303	20	2.3%	78.7%
47	1232	2	0.2%	18.2%	108	1305	22	2.6%	81.3%
48	1233	2	0.2%	18.5%	109	1308	23	2.7%	84.0%
49	1234	5	0.6%	19.1%	110	1311	12	1.4%	85.4%
50	1235	4	0.5%	19.5%	111	1315	13	1.5%	86.9%
51	1236	6	0.7%	20.2%	112	1319	20	2.3%	89.2%
52	1237	1	0.1%	20.4%	113	1323	18	2.1%	91.3%
53	1238	3	0.4%	20.7%	114	1329	18	2.1%	93.5%
54	1239	4	0.5%	21.2%	115	1335	17	2.0%	95.4%
55	1240	5	0.6%	21.8%	116	1344	8	0.9%	96.4%
56	1241	6	0.7%	22.5%	117	1356	5	0.6%	97.0%
57	1242	7	0.8%	23.3%	118	1376	7	0.8%	97.8%
58	1243	5	0.6%	23.9%	119	1416	8	0.9%	98.7%
59	1244	3	0.4%	24.2%	120	1500	11	1.3%	100.0%
60	1245	3	0.4%	24.6%					

Part 9: Validity Evidence

Part 9 of the Technical Report provides evidence supporting the reliability and validity of the 2012 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 2012 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 test items in the rater and performance tasks subtests 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 2012 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
2012 AIMS A Internal Consistency

Grade	Mathematics			Reading			Science		
	N	Alpha		N	Alpha		N	Alpha	
		MC	PT		MC	PT		MC	PT
03	946	.81	.95	946	.81	.95			
04	936	.85	.95	936	.77	.96	936	.87	.96
05	916	.75	.94	916	.84	.96			
06	1003	.76	.94	1003	.88	.97			
07	945	.81	.95	945	.88	.97			
08	913	.77	.95	913	.85	.97	913	.86	.96
HS	1036	.78	.95	1036	.89	.98	855	.87	.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 2012 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 2012 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 2012 AIMS A assessments is provided by the following:

- Correlations between scores on the 2012 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 2012 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
2012 AIMS A Correlation between Assessments
Grade 3

Test	Math	Reading
Math	1	.869
Reading	.869	1

N=946

Table 9.2.1.2
2012 AIMS A Correlation among Assessments
Grade 4

Test	Math	Reading	Science
Math	1	.861	.849
Reading	.861	1	.863
Science	.849	.863	1

N=936

Table 9.2.1.3
2012 AIMS A Correlation between Assessments
Grade 5

Test	Math	Reading
Math	1	.865
Reading	.865	1

N=916

Table 9.2.1.4
2012 AIMS A Correlation between Assessments
Grade 6

Test	Math	Reading
Math	1	.849
Reading	.849	1

N=1003

Table 9.2.1.5
2012 AIMS A Correlation between Assessments
Grade 7

Test	Math	Reading
Math	1	.862
Reading	.862	1

N=945

Table 9.2.1.6
2012 AIMS A Correlation among Assessments
Grade 8

Test	Math	Reading	Science
Math	1	.874	.867
Reading	.874	1	.912
Science	.867	.912	1

N=913

Table 9.2.1.7
2012 AIMS A Correlation among Assessments
High School

Test	Math	Reading	Science
Math	1	.851	.840
Reading	.851	1	.888
Science	.840	.888	1

N=855

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 2012 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
2012 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	1199-1249	1250-1328	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
2012 AIMS A
Standard Error of Measurement at Cut Scores

Test		AS		MS		ES	
		Cut Score	SEM	Cut Score	SEM	Cut Score	SEM
Mathematics	3	1222	10	1250	8	1295	10
	4	1222	11	1250	9	1302	12
	5	1223	11	1250	9	1303	11
	6	1187	19	1250	14	1314	16
	7	1182	20	1250	13	1316	15
	8	1201	17	1250	12	1301	13
	HS	1199	18	1250	13	1329	17
	Reading	3	1211	13	1250	11	1302
4		1187	17	1250	12	1332	20
5		1163	20	1250	14	1331	24
6		1165	20	1250	15	1337	25
7		1182	18	1250	15	1340	25
8		1196	15	1250	12	1331	19
HS		1187	19	1250	14	1345	26
Science		4	1188	16	1250	11	1331
	8	1197	14	1250	10	1315	14
	10	1197	16	1250	11	1309	24

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

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APPENDIX A

AIMS A Eligibility Criteria

Print Form

Arizona Department of Education
Alternate Assessment Eligibility Determination
03/10/2010

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 special needs. 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 MR across all areas: commensurate abilities in mathematics, reading, and writing, adaptive behavior scores, and measures of intellectual abilities.

Check disability category:

- MIMR MOMR SMR
 MD with MR component MDSSI with MR component TBI with MR component
 Autism with MR 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 _____.

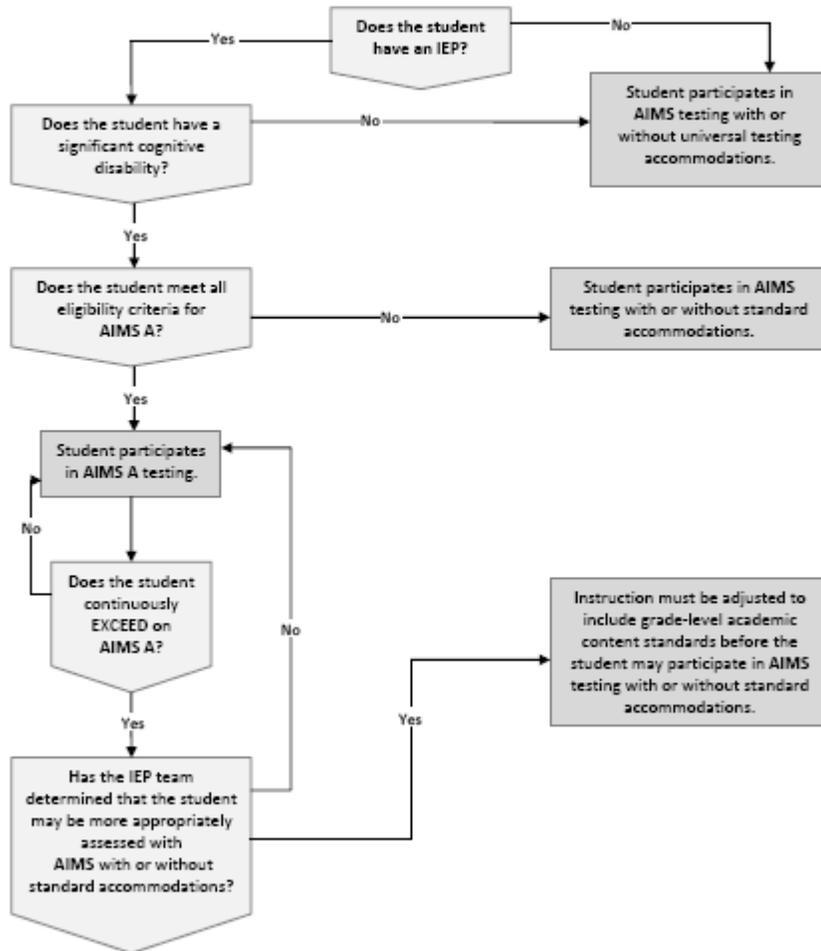
Parent contacted via phone by _____ on _____.

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.



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. <i>(This distracter does not use infinitive format and is not parallel)</i>	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? <i>(If students get this correct they will get the second correct because this question provides the answer for the second.)</i> 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? <i>(Using "not" should be avoided because kids tend to read over it, but sometimes it can't be avoided.)</i> 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 – <i>Stepping format</i>
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 – <i>Another Format.</i>
	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. <i>(This could be an answer based on a misreading.)</i> c. He liked to wear women's clothes. <i>(Even with a misreading this is not plausible and can not be supported with the text.)</i>

9. Identify your answer!

AIMS A ITEM WRITING JULY 10-12

Audra Ahumada

Alternate
Assessment Director

Arizona
Department of
Education

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%.

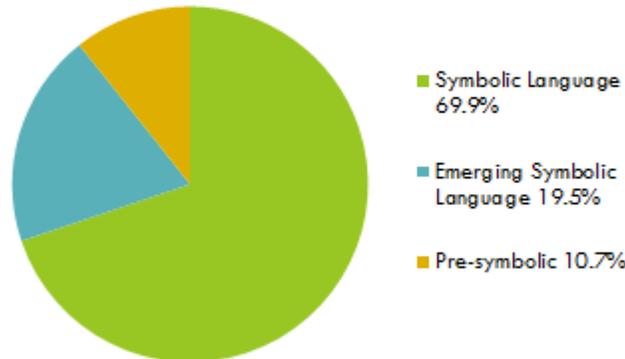
Communication

Expressive communication profile

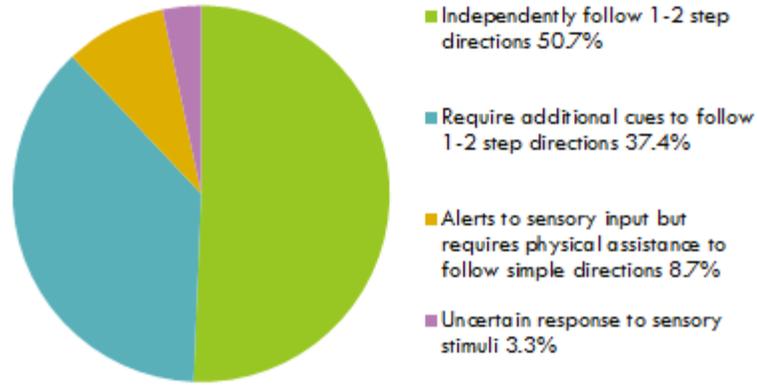
Teachers selected from among the following options for each student's expressive communication characteristics:

- **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.

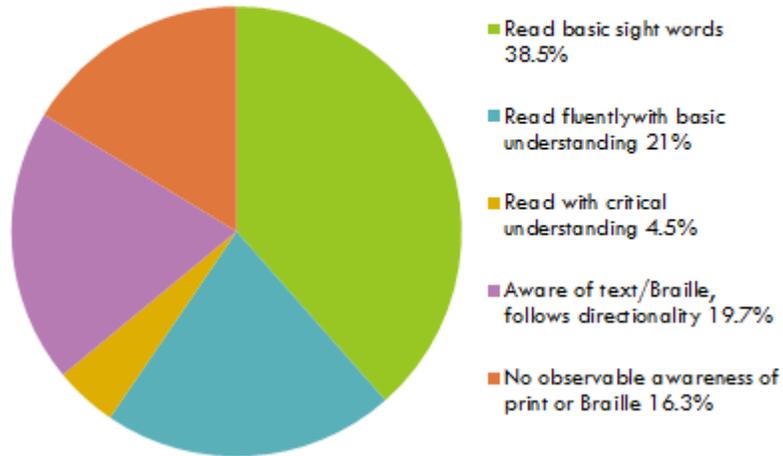
Expressive Communication



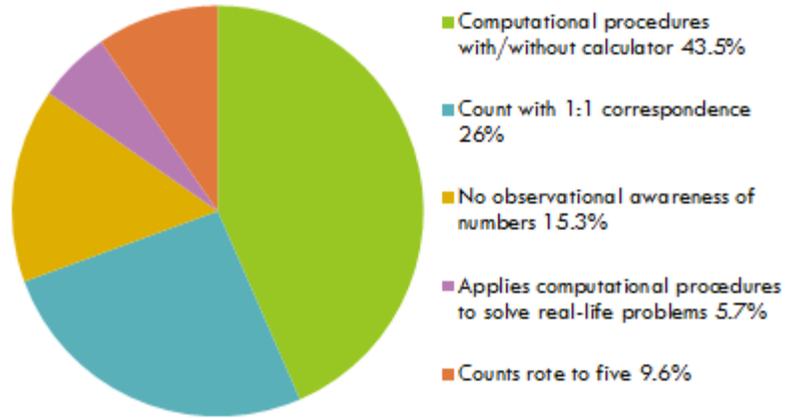
Receptive Communication



Reading



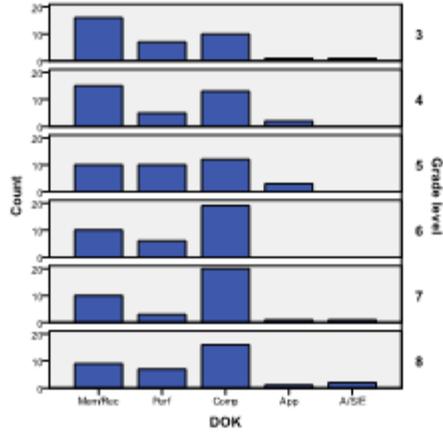
Math



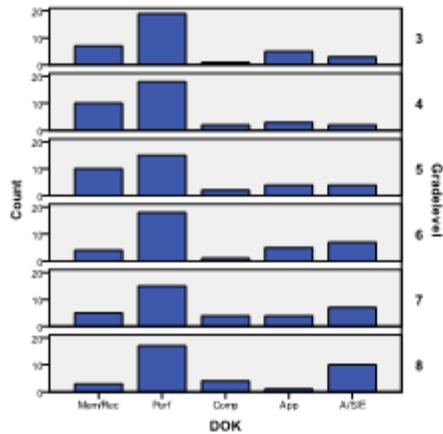
What have we learned about our assessment?

- 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.

Science

Depth of Knowledge (DOK) Levels for Science

Level 1: Recognizing and Recalling

Level 1 tasks require the student to recognize or recall memorized knowledge, such as facts, terms, concepts, and definitions, or to complete highly routine procedures or processes.

Level 2: Using Fundamental Concepts and Processes

Level 2 tasks require the student to describe or apply concepts and processes related to Science.

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 Science to solve multifaceted problems, to justify conclusions, and to support scientific arguments using scientific definitions, properties, and principles.

Item Criteria Do's and Don'ts

- Cue words should be bolded – **main, mainly, most, best, not, before, right after, last, at least, etc.**
- No italics – titles of books, etc., should be underlined.
- Tested vocabulary should be underlined in the passage and in the questions (should appear in the same font, size, etc., in the questions as in the passage).
- Questions and answer choices should be stated clearly and concisely.
- Information in the stem should not clue answers to the question or other questions.
- Items should clearly assess the standard and performance objective.
- Closed and open stems can be used.
- Use periods at the end of answer choices for open-stem items if they complete the sentence.
- Numerical answer choices should be in ascending or descending order, when possible.
- Multiple-choice fill-in-the-blank items may be used when applicable, however use should be minimal.
- Stems must really ask a question or pose a problem.
- Avoid using "never" and "always" in answer choices.
- Options should fit grammatically, logically, and semantically with the stem. There should be no "throw-away" options.
- Options should be parallel in structure, when possible. If not, option pairs should be parallel or stair stepped.
- There must be one, and only one, correct answer in multiple choice items.
- Do not use "what or why do you think" stems in multiple choice items.

Committee Feedback



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

APPENDIX D

2012 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, 2012 to March 31, 2012. The onsite testing monitors evaluated the environment in which the student was being assessed, as well as the administration of the performance tasks and rater items of the assessment.

The monitoring 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 2011. The sampling was done based on special education need, ethnicity, gender, and region. A total of 60 students were selected. A committee of ADE specialists in special education and familiar with the AIMS A assessments reviewed each recording and made the following suggestions for the 2012 administration.

- To clarify what constitutes prompting, modeling, and cueing.
- To review the Rater Items and determine whether or not to keep these types of items in the assessment or remove and use only multiple choice and performance task items.

From the committee's suggestions, the following will be instituted for the AIMS A 2012 administration.

- Each district is required to send a representative to AIMS A regional training and agree to train all staff in their district on the proper administration. Included in the training is a clarification of prompting, modeling, and cueing, based on recommendations from the National Alternate Assessment Center and guidelines on the proper testing environment.
- The Performance Task and Rater Item Directions will be clarified to include those definitions on prompting, modeling, and cueing provided by the National Alternate Assessment Center.
- The Rater Item Data Sheets will be amended to include more information on the assessed items.

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 (Identify 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