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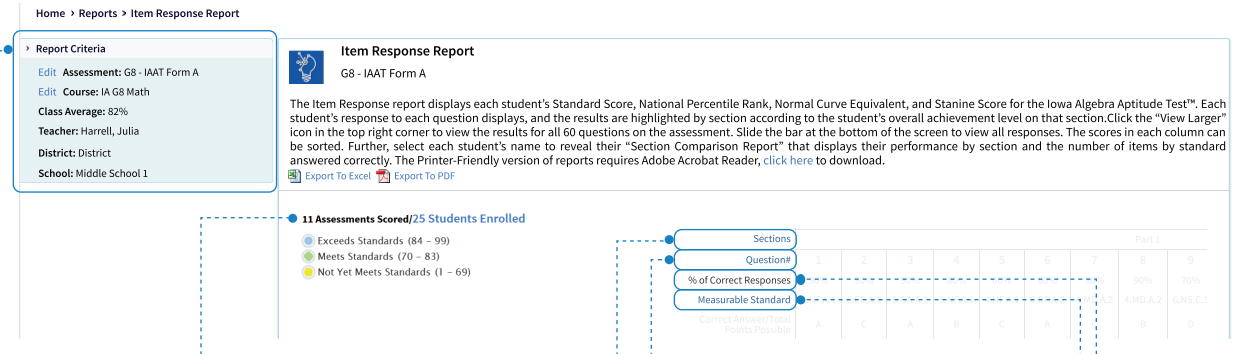
This report best answers:

- What is each student's raw score, standard score, percentile rank, normal curve equivalent, and stanine on the *IAAT*? Which students may be ready to enroll in Algebra I, with additional data to support the decision?
- On which section of the *IAAT* did each student score the highest and lowest?
- Which questions did more students answer incorrectly? What misconceptions might be addressed and where might reteaching need to occur?
- On which standard(s) do the students in this class/at this school need additional instruction or practice?
- On which standard(s) might students benefit from extension activities?

Iowa Algebra Aptitude Test™ (*IAAT*™): Item Response Report

Purpose: This report provides each student's raw score, standard score, national percentile rank, normal curve equivalent, and stanine score for one administration of the *IAAT*. Student performance by question and test section also displays, with incorrect responses reported. Student results are color coded according to the achievement level associated with the student's score. Data in this report are useful for reviewing the specific questions students missed and conducting a distractor analysis, quickly identifying the most-frequently-missed questions and the associated distractor responses, and noting any misconceptions present or student learning gaps. Grouping students by stanine and performance on each standard for reteaching, enrichment, and class instruction are also ways to use the data in this report. Additionally, comparing each student's standard score to past or future performance will identify growth in learning. Results can be used to identify student strengths and weaknesses in math, inform program placement and success in an Algebra I classroom, and create class and student goals.



Report Criteria— Details the math course, the overall percent correct score averaged for the group, and the school information. Click the "Edit" link to select a different assessment to view in the report.

Achievement Level Legend—There are three performance levels identifying the cut scores recommended for admission into an Algebra I course. Exceeds Standards is blue and has a range of 84–99, Meets Standards is green and has a range of 70–83, and Not Yet Meets Standards is yellow and has a range of 1–69. Associated with each cut score is the 2024 national percentile rank (NPR).

Sections (*Heading Available on the Item Response Analysis by Section Report*)**—**Questions on the *IAAT* are grouped in 4 sections, measuring a student's skills in 4 focused pre-algebra areas.
Section 1: Pre-Algebraic Number Skills and Concepts (questions #1–15)
Section 2: Interpreting Mathematical Information (questions #16–30)
Section 3: Representing Relationships (questions #31–45)
Section 4: Using Symbols (questions #46–60)

Hover over a section to reveal the score for each part.

Question#—Click each question number to view the question stem, correct answer, three provided distractors, associated standard, and strand/domain in which the standard lives.

% of Correct Responses—The percentage of students in the group who answered the associated question correctly.

Measurable Standard—Identifies the standard associated with each question on the *IAAT*.

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- **Student Name**—Click the header to sort the students alphabetically and in reverse order.

  Selecting a student's name from the Item Analysis Report will display their Student Report. This report shows a breakdown of student performance by domain. This report can be sent home to parents/guardians or discussed at conferences.

- **Percentile Rank**—A score of 1–99, converted from the standard score. It shows the student's relative position (or rank) compared to others who took all 4 parts of the *IAAT*. Percentile ranks are referenced at the national or local level.

- **NCE**—A score of 1–99 (mean of 50) that is a normalized standard score used to determine the student's growth over time. NCE scores correspond to percentile ranks of 1–99. Trends can be analyzed from the scores from one year to the next, for the student or group, to note how quickly or slowly the student or group is learning math.

- **Stanine Scores**—The student's standard score converted to a normalized score that identifies the status or relative rank of achievement on a bell curve. A stanine is represented as a number between 1–9. The stanines are grouped in threes and are noted as achievement "below average" (scores of 1, 2, or 3), "average" (scores of 4, 5, or 6), and "above average" (scores of 7, 8, or 9).

							1	2	3	4	5
						Sections					
						Question#	1	2	3	4	5
						% of Correct Responses	90%	90%	90%	80%	60%
						Percentile Standard	5.NF.A.1	6.EE.A.1	5.OA.A.1	5.NF.A.1	4.NF.A.1
						Correct Answer/Total Points Possible	A	C	A	B	C
Student Name	Student ID	# Correct	Standard Score	Percentile Rank	NCE	Stanine Score					
Brady, Jordan	11120	46/60	165	81	68	7	+	+	+	+	+
Bradyhaines, Kayla	13361	45/60	164	79	67	7	+	+	+	+	+
Brill, Lauren	13562	35/60	154	55	53	5	+	+	+	A	D
Brown, Bonnie	14588	37/60	156	61	56	6	+	+	+	+	+
Browngregory, Andreas	10382	59/60	194	99	99	9	+	+	+	+	+
Bryant, Jenna	13965	6/60	108	1	1	1	D	B	+	A	D
Burch, Cali	16781	12/60	123	3	10	1	D	+	C	C	A
Burgarella, Brennan	11315	19/60	136	14	27	3	+	+	+	+	+
						Most Common Distractor	B	B	C	A,C	B
						% Students Selecting Distractor	10%	10%	10%	10%	20%

- **Student ID and # Correct**—Click the headers to sort in ascending or descending numerical order. The # Correct is the number of questions the student answered correctly (in all 4 sections combined), divided by the total number of questions on the *IAAT*.

- **Standard Score**—A 3-digit number converted from the raw score, indicating the student's average achievement on a continuum scale. It measures the amount of academic growth year over year. The raw score mean corresponds to a normalized standard score of 150.

- **Most Common Distractor**—The most-frequently-selected incorrect response among those students who answered the question incorrectly.

- **% Students Selecting Distractor**—The percentage of students in the group who responded with the most-frequently-selected incorrect response.

- The student's response to each question. Each letter displayed indicates the student's incorrect answer. Each + indicates that the student answered the question correctly.

Report Access in *EdAssess*:

- Click the "Class Name."
- Click "Reports" (top menu).
- Click "Item Response Analysis or Item Response Analysis by Section."
- Select the Subject, Course, and School from the drop down.
- Select the assessment.
- Click "Next."
- Expand the view in the upper right corner ("View Larger").
- Export the report to Excel or a PDF, if desired.

EdAssess BY PROMETRIC

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Assessment Design

The *Iowa Algebra Aptitude Test, Sixth Edition* is a standardized, fixed-format, 4-part, multiple-choice math assessment that measures a student's math abilities in pre-algebraic number skills and concepts, math information interpretation, relationship representation, and symbol usage. The *IAAT* is designed to help teachers, school counselors, administrators, students, and parents determine the right time for student enrollment in an algebra class so that the student is appropriately challenged, confident, and successful in Algebra I, without encountering coursework that is beyond their means.

The online administration of the *IAAT* allows for immediate data and score updates and has a clickable dashboard for customized selections.

Note:

Administrators can view students' overall performance in all classes or view the report from a teacher's perspective.

Questions for Investigation

- Sort the student stanine scores in descending order. Which students may qualify for Algebra I? Use additional data available (class assessments and performance, other normed assessments, and teacher recommendations) to support the decision.
- Which 5–10 questions did the highest percentage of students answer incorrectly? (Review the "% of Correct Responses" row to identify the lowest percentages.) Which distractor was the most-frequently-selected response on each of these questions? Click the question number in the top row to view each question and the associated distractors. What misconceptions may need to be addressed, or what opportunities are available for reteaching and individual, small group, and/or whole group instruction?
- On which 3 standards did the students perform the highest? What instructional strategies, resources, or programs may have contributed to the success of the high performance? On which 3 standards did the students perform the lowest? What instructional resources, strategies, or programs may need to be implemented to improve performance in each area? Share with others (if applicable) resources/ideas for helping particular students master any or all 3 identified standards.
- How can students be sorted for instructional purposes to improve their performance on particular standards and/or questions?

Key Insights

Teachers and administrators will be able to identify those students ready to enroll in Algebra I and provide additional data to support the decision.

Teachers and administrators will discover the individual questions each student answered correctly and incorrectly on each standard assessed.

Distractor analysis of the assessed questions will support instructional groupings and help teachers and administrators identify misconceptions for reteaching.