

Comprehensive Algebra I Assessment

Let's Go Learn's *Diagnostic Online Math Assessment (DOMA) Algebra* evaluates skills taught during the crucial Algebra I year. *DOMA Algebra* can be used to assess students in middle school, high school, and continuing education programs to determine their understanding of key Algebra constructs. The online program adapts to student responses by difficulty level and construct, clearly identifying mastery/non-mastery, either by full assessment or by placement during the pre-screening.

Adaptive and Interactive Assessment

The *DOMA Algebra* assessment evaluates 11 different areas of math knowledge that educators consider essential constructs of Algebra I. Middle school and high school interfaces engage secondary learners and make testing more fun and relevant. *DOMA*'s adaptive technology intelligently decides which specific test items will be given to each student. Based on individual student performance during the assessment, *DOMA* adjusts in difficulty, item selection, and construct selection. These adaptations allow *DOMA* to measure a wide range of student abilities efficiently and accurately.

The *DOMA Algebra* assessment is divided into two parts:

Part I - Pre-Screening: This section presents students with two questions representing each of the 11 Algebra constructs determined to encompass the essential knowledge of Algebra I. The 11 Algebra constructs are aligned to NCTM standards. Based on Pre-Screening results, students may test out of constructs on which they have demonstrated mastery. Constructs in Part II of the assessment may be skipped or abbreviated based on performance.

Part II - Pre-Algebra Constructs: This section outlines the detailed test items that make up each of the 11 Algebra constructs. Full construct testing will vary based on the student's performance. *DOMA Algebra*'s adaptive logic will also adjust the number of questions given to a student in real-time, based on his or her error rate. This reduces student test frustration and increases the reliability of the overall assessment.




The 11 Foundation Constructs Assessed by *DOMA Algebra*:

Evaluating Advanced Exponents	Quadratic Equations
Solving Linear Equations	Solving and Graphing Systems of Linear Equations
Graphing and Analyzing Linear Equations	Polynomial Operations
Relations and Functions	Factoring Polynomials
Solving and Graphing Inequalities	Radical Expressions and Equations
	Rational Expressions and Equations

Reports Illustrate Mastery/Non-Mastery

DOMA's student management system tracks each student's performance on the *DOMA Algebra* assessment and allows teachers to sort data in a number of ways, such as by student, assessment date, or level of proficiency on each of the 11 algebra constructs. Teachers may also access *DOMA Algebra* assessment reports and standards reports through the student management system.

Algebra Legend

-  mastery of construct
-  partial understanding of construct
-  non-mastery of construct

[Scores & Reports Home](#)
Algebra
Math Basic Skills
Reading K-12

First Name	Last Name	Grade	Last Assess.	Prev. Assess.	Pre-Screen	1	2	3	4	5	6	7	8	9	10	11	Detailed Reports
		help	help	help	help	?	?	?	?	?	?	?	?	?	?	?	help
sort	sort	sort	sort	sort	sort	so	so	so	so	so	so	so	so	so	so	so	
Allan	Delforge	2	3/6/2005	Yes	74%	●	●	●	●	●	●	●	●	●	●	●	Detail, Standards
Erik	Green	2	3/5/2005	Yes	38%	●	●	●	●	●	●	●	●	●	●	●	Detail, Standards
Molly	Hunt	2	3/5/2005	-	87%	●	●	●	●	●	●	●	●	●	●	●	Detail, Standards
Michael	Nelson	2	3/5/2005	Yes	50%	●	●	●	●	●	●	●	●	●	●	●	Detail, Standards
Spring	McCall	2	2/27/2005	-	67%	●	●	●	●	●	●	●	●	●	●	●	Detail, Standards

Let's Go Learn	
Student: Tom Jacob	Assessment Date: 2/08/2005
Diagnostic Summary - (6 out of 11 constructs mastered)	
Part I - Prescreening 75.1 % Correct	
Prescreening	Results
Part II - Algebra	
Eval. Adv. Exponents	Results
Solving Linear Equations.....	Results
Graph & Analyze Linear Equ ..	Results
Relations & Functions.	Results
Solving & Graphing Inequal....	Results
Solv. & Grap. Sys. of Lin Equ..	Results
Polynomial Operations	Results
Factoring Polynomials	Results
Radical Expressions & Equ	Results
Quadratic Expressions	Results
Rational Expres. & Equ.	Results

▲ Easy-to-read reports provide teachers and parents with a comprehensive report of students' success in Algebra I. The *DOMA Algebra* assessment report's "Diagnostic Summary" table shown above provides an overview of mastery in each of the areas of Algebra I. The overall percentage correct is also displayed for easy progress monitoring.

► For each of the 11 algebra constructs, the detailed report shown on the right indicates if mastery was demonstrated by Pre-Screening or by completing the construct testing, or if non-mastery was demonstrated by the construct testing. Mastery of a construct is determined by the student either correctly answering the corresponding pre-screening questions or correctly answering 75 percent or more of the questions in the full construct set. All non-mastery constructs are designated as priorities in need of review or further instruction. The detailed breakouts of each construct shows how students tested in each skill area. Skill areas are tested from easiest to hardest. Our adaptive logic stops skill area testing within a construct if the student is clearly developmental in that area. This reduces test-taker frustration.

Related Let's Go Learn Solutions

DOMA Pre-Algebra provides a detailed examination of students' preparedness for entering Algebra I.

LGL Pre-Algebra Edge offers differentiated online math instruction attached to the *DOMA Pre-Algebra* assessment.

LGL Algebra Edge offers differentiated online math instruction attached to the *DOMA Algebra* assessment.

Let's Go Learn		Algebra Diagnostic
○ Construct 7: Polynomial Operations <i>Non-mastery demonstrated by construct testing</i>		
Test Question	Results	
Adding polynomials	-	
Subtracting polynomials	-	
Multiplying a monomial by a polynomial	-	
Multiplying polynomials	-	
Squaring polynomials	nt	
Evaluating a polynomial	nt	
Solving polynomial equations	nt	
Finding the additive inverse of a polynomial	nt	
○ Construct 8: Factoring Polynomials <i>Non-mastery demonstrated by construct testing</i>		
Test Question	Results	
Factoring binomials	-	
Factoring polynomials	-	
Factoring trinomials	-	
Finding the difference of squares	-	
Identifying a perfect square trinomial	nt	
Identifying a prime polynomials	nt	
Solving polynomial equations	nt	
○ Construct 9: Radical Expressions and Equations <i>Mastery demonstrated by complete construct testing</i>		
Test Question	Results	
Simplifying radical expressions without variables ..	+	
Simplifying radical expressions with variables	+	
Rationalizing the denominator of a rational expression	+	
Adding radical expressions	+	
Subtracting radical expressions	+	
Multiplying radical expressions	+	
Solving radical equations	+	
○ Construct 10: Quadratic Equations <i>Mastery demonstrated by complete construct testing</i>		
Test Question	Results	
Finding the axis of symmetry of a quadratic equation	+	
Finding the vertex coordinates of a quadratic equation	+	
Finding the x-intercepts of a quadratic equation ..	+	
Graphing quadratic equations	+	
Identifying a perfect square trinomial	+	
Completing the square of a quadratic equation	+	
Solving quadratic equations	+	
○ Construct 11: Rational Expressions and Equations <i>Non-mastery demonstrated by construct testing</i>		
Test Question	Results	
Identifying exclusions in the denominator	-	
Simplifying rational expressions	-	
Multiplying rational expressions	-	
Dividing rational expressions	-	
Adding rational expressions with like denominators	nt	
Subtracting rational expressions with like denominators	nt	
Adding rational expressions with unlike denominators	nt	
Subtracting rational expressions with unlike denominators	nt	
Solving rational equations	nt	

This student missed the first four questions in this construct. The assessment therefore stopped testing the remaining skills areas and marked this construct as "non-mastery"

These two skill areas were identified as being responsible for the student's partial mastery of this construct.

An OAASIS® from Traditional Assessment

Administrators and teachers who need relief from time and labor-intensive assessments now have a solution. OAASIS, Let's Go Learn's *Online Adaptive Assessment System for Individual Students*, is a proprietary technology-based platform that simultaneously tests and reports on multiple skills while adapting to each learner's individual ability in real time as a human would. OAASIS serves as the foundation for Let's Go Learn's solutions, including *DORA*, *LGL Reading and Comprehension Edge*, *DOMA Basic Math Skills*, *DOMA Pre-Algebra*, *DOMA Algebra*, and *LGL Pre-Algebra and Algebra Edge*.

Getting Started

To speak with a customer service representative or request a free trial, please contact us today:

Phone 1-866-618-MATH (6284)
 Web www.letsgolearn.com
 Email sales@letsgolearn.com
 Free Trial www.letsgolearn.com/trial.html