Pre-Algebra Pathways

Assessment-Driven,
Differentiated Instruction

Let's Go Learn
www.letsgolearn.com

Differentiated Online Pre-Algebra Instruction

Pre-Algebra Pathways brings together comprehensive pre-algebra skills assessment with differentiated instruction, all administered in an interactive, online learning environment. Let's Go Learn's *Diagnostic Online Math Assessment (DOMA) Pre-Algebra* first performs a detailed assessment of each student's pre-algebra abilities across 14 different mathematical constructs aligned with NCTM and state standards. After the initial assessment, the program transitions the student into interactive tutorials and activities that improve math skills identified by educators as essential for success in Algebra I.

How it Works

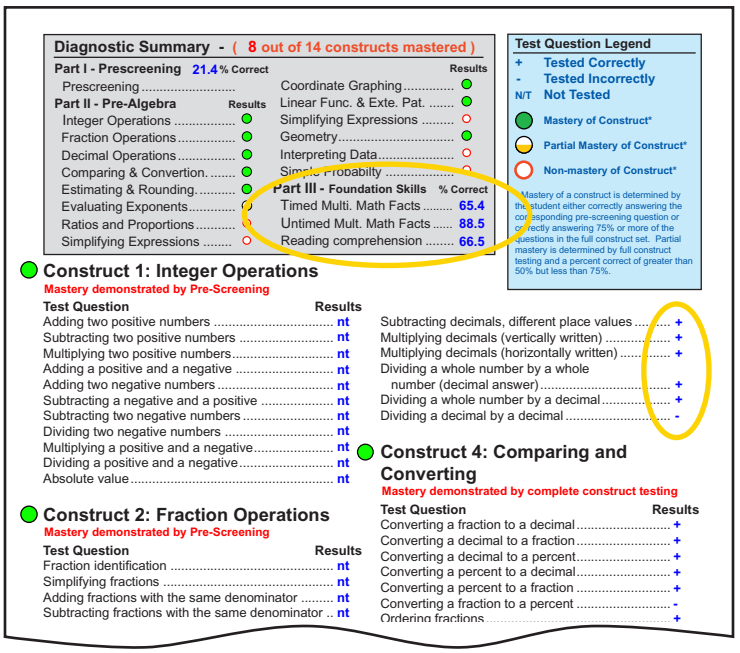
The first step to successfully addressing individual students' learning is accurate assessment of their current understanding of specific material. *DOMA Pre-Algebra* assesses 14 areas of pre-requisite mathematical knowledge, needed for success at the Algebra I level. The assessment's advanced adaptive features reduce the total assessment time, increase the diagnostic nature of the program, and maximize the useful information teachers receive. Immediately after the assessment, students who qualify for instruction are automatically transitioned into powerful online pre-algebra lessons.

- Step ONE: An individualized math profile is generated for each student enabling teachers to clearly identify specific math constructs needing targeted instruction.
- Step TWO: Supplemental instruction is automatic and tailored to each student's individual needs through a self-paced individualized lesson plan (See page 2).

Pre-Algebra Pathways Improves Algebra Readiness Skills

The targeted lessons featured in *Pre-Algebra Pathways* use online versions of familiar math manipulatives and models to help students understand lessons and apply their learning to real-world problem solving. Lessons are easy to understand and engaging, with multiple opportunities for guided instruction and student practice.

Lessons scaffold learning through instruction, guided practice, interactive lessons and resources, as well as end-of-lesson assessments, allowing students to build understanding based on previous lessons and prior knowledge. Differentiated instruction means that each student receives instruction at his or her own level, so students learn at their own individual paces, following the path that works best for them.



Diagnostic Summary - (8 out of 14 constructs mastered)

Part I - Prescreening	21.4 % Correct
Prescreening	

Part II - Pre-Algebra	Results
Integer Operations	
Fraction Operations	
Decimal Operations	
Comparing & Convertion.	
Estimating & Rounding	
Evaluating Exponents	
Ratios and Proportions	
Simplifying Expressions	
Coordinate Graphing	
Linear Func. & Exte. Pat.	
Simplifying Expressions	
Geometry	
Interpreting Data	
Simple Probability	

Part III - Foundation Skills	% Correct
Timed Multi. Math Facts	65.4
Untimed Mult. Math Facts	88.5
Reading comprehension	66.5

Test Question Legend

+ Tested Correctly
- Tested Incorrectly
N/T Not Tested

Mastery of Construct*
Partial Mastery of Construct*
Non-mastery of Construct*

*Mastery of a construct is determined by the student either correctly answering the corresponding pre-screening question or correctly answering 75% or more of the questions in the full construct set. Partial mastery is determined by full construct testing and a percent correct of greater than 50% but less than 75%.

Construct 1: Integer Operations
Mastery demonstrated by Pre-Screening

Test Question	Results
Adding two positive numbers	nt
Subtracting two positive numbers	nt
Multiplying two positive numbers	nt
Adding a positive and a negative	nt
Adding two negative numbers	nt
Subtracting a negative and a positive	nt
Subtracting two negative numbers	nt
Dividing two negative numbers	nt
Multiplying a positive and a negative	nt
Dividing a positive and a negative	nt
Absolute value	nt
Subtracting decimals, different place values	+
Multiplying decimals (vertically written)	+
Multiplying decimals (horizontally written)	+
Dividing a whole number by a whole number (decimal answer)	+
Dividing a whole number by a decimal	+
Dividing a decimal by a decimal	-

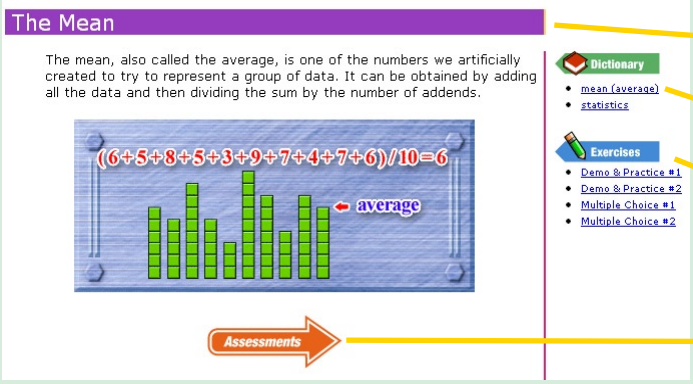
Construct 2: Fraction Operations
Mastery demonstrated by Pre-Screening

Test Question	Results
Fraction identification	nt
Simplifying fractions	nt
Adding fractions with the same denominator	nt
Subtracting fractions with the same denominator	nt

Construct 4: Comparing and Converting
Mastery demonstrated by complete construct testing

Test Question	Results
Converting a fraction to a decimal	+
Converting a decimal to a fraction	+
Converting a decimal to a percent	+
Converting a percent to a decimal	+
Converting a percent to a fraction	+
Converting a fraction to a percent	-
Ordering fractions	+

This page from the detailed student report shows both summary data on the student's unique profile as well as detailed gap data within the 14 construct areas of Pre-Algebra. Furthermore, if necessary foundation skills are assessed in reading and multiplication math facts.



- Multi-media lessons include step-by-step instructions and example problems
- Interactive resources include a dictionary of important mathematical terms
- Practice exercises allow students to apply what they've learned.
- Easy-to-follow, interactive demonstrations walk students through sample problems one step at a time.
- End-of-lesson tests help teachers monitor students' progress in their lessons.

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Value for Teachers and Students

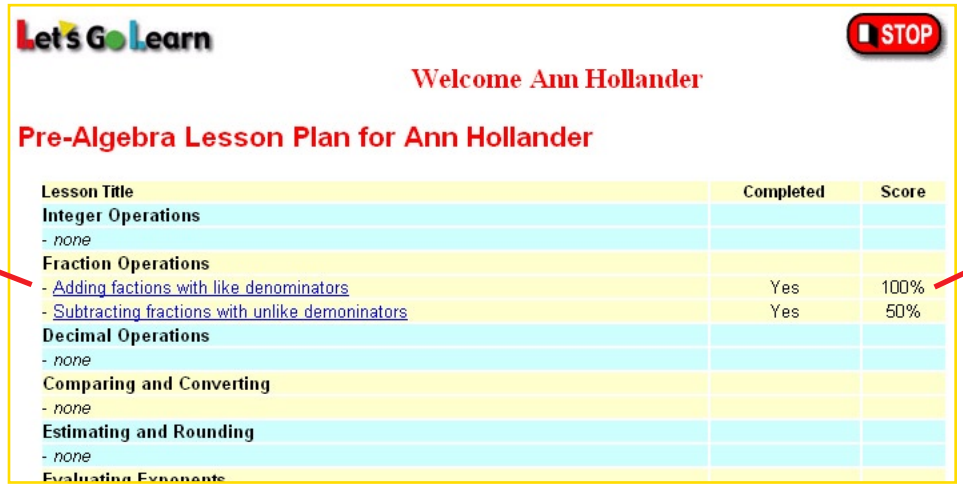
Pre-Algebra Pathways addresses skills necessary for success in Algebra I and also serves as a great preparation for high school exit exams. The application works in a lab setting or on classroom computers and helps teachers address the wide range of math abilities found in most classes today.

Following the initial Pre-Algebra assessment, the *DOMA* student management system provides teachers with individualized reports on each student. A detailed summary report provides a diagnostic and easy-to-understand explanation of each student's math abilities, outlining not just construct mastery, but individual item mastery as well. Once a student begins Pre-Algebra instruction, the teacher can view where each student is in the curriculum. If necessary, the teacher can adjust a student's lessons or monitor students participating in supplemental after-school learning programs.

Why *Pre-Algebra Pathways?*

- Over 200 complete lessons, with accompanying practice exercises and assessment delivered to each student's unique needs!
- Excellent for identifying students' preparedness for Algebra I or for preparing for high school exit exams
- Designed specifically for demanding and diverse 21st-century learners
- Enables administrators and teachers to make timely, data-driven decisions and to provide true differentiated instruction
- Intelligently builds and improves essential math skills students required for success in school and on high-stakes tests
- Covers skills across the NCTM Standards

After the assessment, students go to their own unique lesson plan. Only the lessons in which they need help are hypertext linked.



After each lesson, a short quiz is given to each student. Scores appear for both the teacher and student to view. Students can then choose to review lessons again for additional review.

Related Let's Go Learn Solutions

DOMA Pre-Algebra is a comprehensive assessment of Algebra Readiness.
DOMA Basic Math Skills is a basic math skills assessment that creates a unique profile for each student.
Unique Math offers differentiated online basic math skills instruction.

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* servers as the foundation for Let's Go Learn's entire family of solutions in reading and mathematics.

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