



ALEKS[®]

MMATYC

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www.successinmath.com

Your McGraw-Hill Team

What is ALEKS?

ALEKS is an adaptive online system that delivers an individualized learning experience tailored to students' unique strengths and weaknesses.

What does adaptive mean?

- Assessments and instruction are tailored to each individual student based on their strengths and weaknesses.
- Artificial intelligence constantly measures retention of topics learned in the past.
- Struggling students get exactly the support they need to be successful. Stronger students are only presented with material they need to learn to reduce repetition.
- Faculty can ensure that every student in their class is receiving the support they need.

How does ALEKS work?

- Born from NSF-funded research by mathematicians and cognitive scientists from UC Irvine and NYU
- Is the practical realization of Knowledge Space Theory, the field of study in mathematical cognitive science developed by the founder of ALEKS
- Over a decade of data collection has refined the system to be highly accurate in measuring student knowledge and improving learning outcomes

What are the Core Challenges in Math?

1. Student Preparedness
2. Students Learn at Different Paces
3. Inconsistency Between Homework and Test Scores
4. Ensure Students are Ready for Topics

ALEKS was created to address these core challenges.

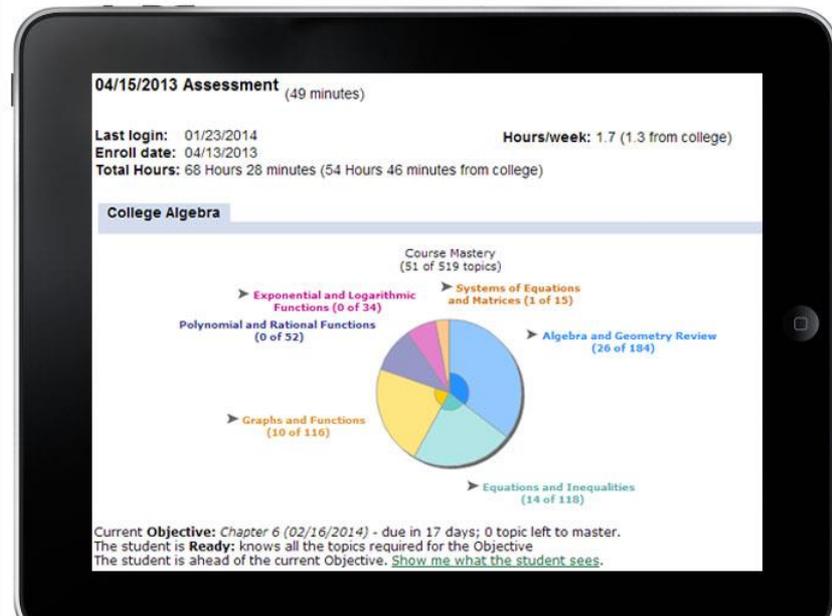
1. Student Preparedness

- Students arrive in the course with a wide variety of prerequisite knowledge.
- What if you could see on day one of the course exactly what each student knows and what they don't know?

ALEKS Initial Assessment

An adaptive assessment that measures exactly what students know, don't know, and more importantly what they are ready to learn

Now you can see on day one what each student needs to learn.

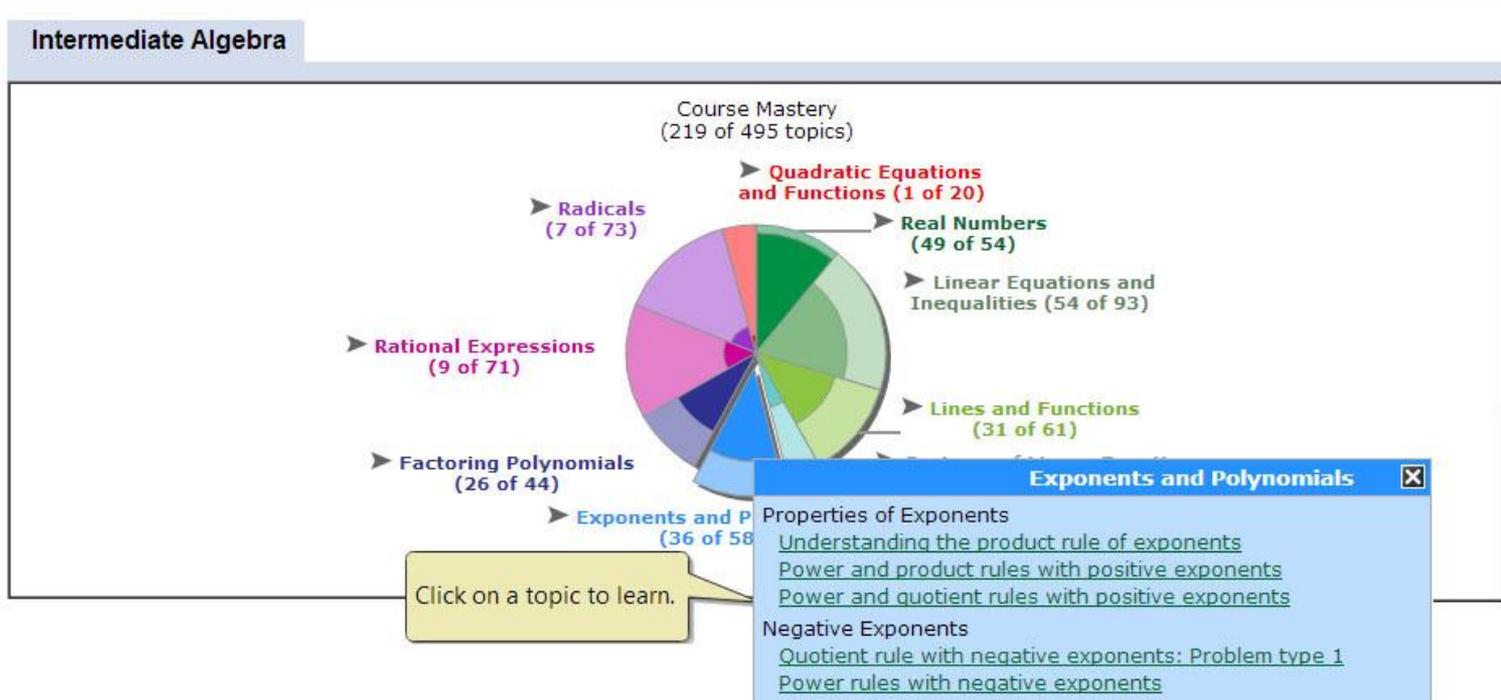


2. Students Learn at Different Paces

- Some students need additional support to master certain topics.
- How do you support struggling students without slowing down the whole class?

ALEKS Adaptive Learning

Struggling students are given the help they need to succeed without slowing down the class.



3. Inconsistency Between Homework and Test Scores

- Do your students perform better on homework than on tests?
- How can you ensure that students don't game the system?

Learning vs. Memorizing

- Problem structures change to prevent students from copying learning aids and gaming the system.
- Students must answer questions correctly multiple times to prove they have learned the concept.

Solve for x .

$$\frac{3x+17}{4} = 2$$

Simplify your answer as much as possible.

$x =$ <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Clear	Undo
		Help

Next >>

Explain

4. Ensure Students are Ready for Topics

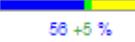
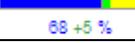
- If students try material they are unprepared for, it causes frustration and becomes a roadblock.
- If students are only presented with material they are Ready to Learn, confidence is boosted and success rates are higher.

ALEKS Ready to Learn

- Students are only presented with topics if they have proven mastery of the related prerequisites.
- This is proven to boost motivation, reduce frustration, and increase student success.

Reports

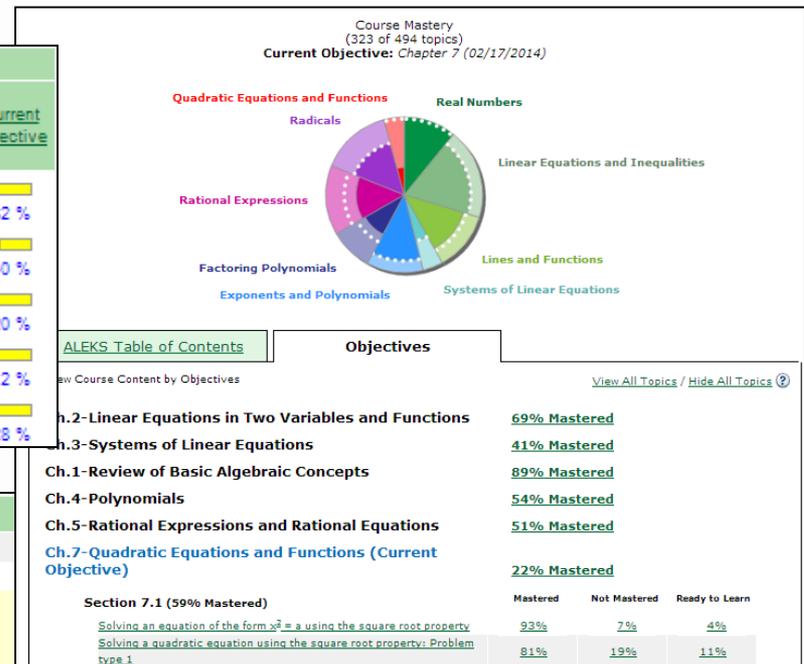
ALEKS reporting is extremely powerful, allowing you to closely monitor students and use the data to inform your teaching.

All	Name (Login/Student Id)	Total time in ALEKS (hrs)	Last login	Last assessment	Performance ?	
					Course Mastery Show: Percent / Topics	Current Objective
1	Alberti, Daniel P.	82.4	01/20/2014	01/08/2014	 65 +4 %	 32 %
2	Bush, David E.	95.1	01/18/2014	01/02/2014	 76 +4 %	 40 %
3	Bush, Herbert P.	60.8	01/20/2014	01/09/2014	 64 +4 %	 20 %
4	Cameron, Jane J.	80.6	01/20/2014	01/13/2014	 56 +5 %	 12 %
5	Carter, John R.	109.7	01/20/2014	01/08/2014	 68 +5 %	 28 %

Date	Time Spent in ALEKS ?	Topics Attempted ?
Sun 1/05/14	14 minutes	3 topics
Sat 1/04/14	20 minutes	2 topics

List of topics attempted on 1/04/14:
Optional: You may click on the topic titles to have ALEKS display an example of the topic.

- Systems of Linear Equations / Applications
 - [Solving a percent mixture problem using a system of linear equations*](#)



Why choose ALEKS?

- By adapting to each student, 100% of your class gets the individual support they need.
- With powerful reporting you can measure exactly where your class needs support and constantly monitor progress.
- It is proven to significantly improve student performance.

Any questions?