

## Average Report (Pie Chart)

The “Average report (pie chart)” report shows the average learning rates and a detailed view of what students have mastered, not mastered, and are ready to learn. The pie chart identifies the average progress toward completion of the course; when Objectives or Modules are used, white dots show progress toward completion of the current objective. Beneath the pie chart is a breakdown of course topics and the mastery percentage of each topic, which can be viewed by Objectives or ALEKS Table of Contents.

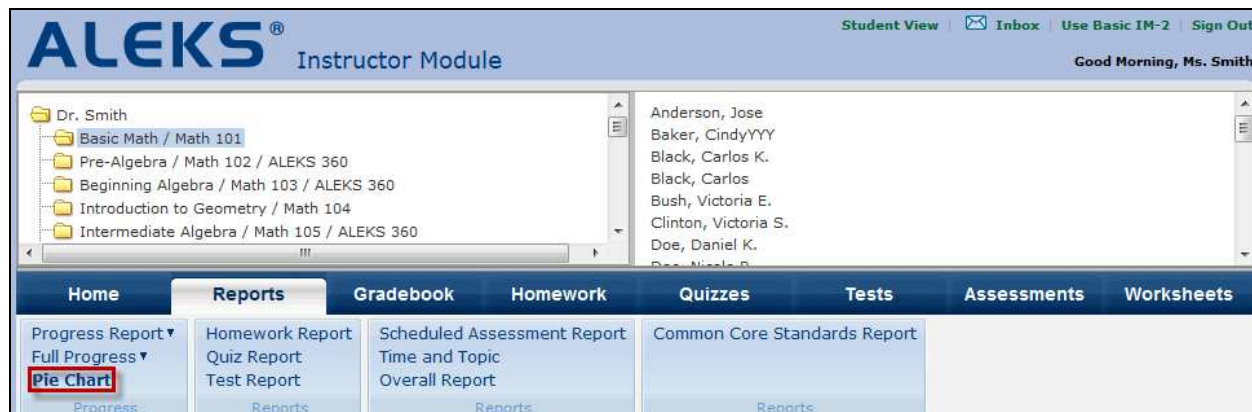
The most effective use of this report is determining where students are in the course, specifically what topics they have mastered, not mastered, and are ready to learn. Instructors can use this information to plan classroom instruction, group students based on knowledge and level of readiness, and communicate directly with each group. For example, if the instructor clicks on a topic that a sub-set of students is ready to learn, the instructor can send those students a message using the ALEKS Message Center directly from this report.

The “Average report (pie chart)” report is available for all Higher Ed courses in the Basic and Advanced Instructor Modules.

### Basic Instructor Module

The screenshot displays the ALEKS interface for a course titled "Math 101 / Basic Math". The top navigation bar includes tabs for Home, Reports, Gradebook, Homework, Quizzes, Tests, Assessments, and Worksheets. The "Reports" tab is selected. Below the course title, a message asks the user to choose one of the following course reports. Under "Progress Reports:", several options are listed, with "Average report (pie chart)" highlighted by a red rectangular box. Other options include "Learning progress since latest assessment", "Detailed progress history", "Overall progress in assessment", "Time and topic report for all students", "Knowledge Per Slice", and "Common Core standards report". Under "Assignment Reports:", options include "Homework results for all students", "Quiz results for all students", "Test results for all students", and "Scheduled assessment report". At the bottom, a note states that detailed reports for individual students can be viewed. On the right side, a sidebar shows the current date as "December 6, 2011" and lists "Upcoming Due Dates" for Dec 12, Dec 15, Dec 23, and Dec 26, with associated tasks like Chapter 6, Quiz 5, Chapter 7, and Homework 9. A "Course Calendar" link is also present.

## Advanced Instructor Module



NOTE: This report shows data for students who have taken an ALEKS Initial Assessment. Students who have not taken an initial assessment will not be shown in the live report but they will be shown in the Excel spreadsheet download.

Complete details on which topics students have mastered, not mastered, and are ready to learn in the course are available in the section below the pie chart.

If an instructor is using textbook integration, Objectives, or Modules in the course, an “Objectives” tab will appear. Instructors can change the view by toggling between the “ALEKS Table of Contents” tab and the “Objectives” tab. The “Objectives” tab will always be the default view (unless Objectives are not used in the course).

NOTE: The “Current Objective” title and the dotted lines on the pie chart are displayed only when “Current Learning” is selected in the “Show” drop-down.

# Average report



Number of Students: 33

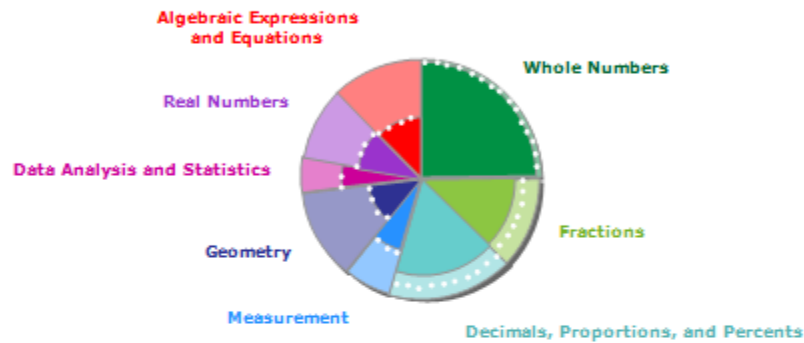
This report shows data for 32 students that have taken an initial assessment. ?

Show: Current Learning

[Download Excel Spreadsheet \(Pie\) ?](#)

[Download Excel Spreadsheet \(Objective\) ?](#)

Course Mastery  
(174 of 278 Topics)  
Current Objective: Chapter 6 (12/22/2011)



[ALEKS Table of Contents](#)

**Objectives**

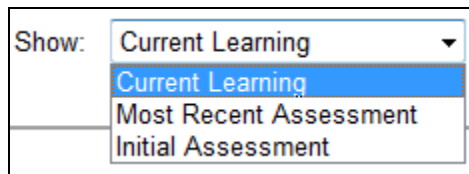
View Course Content by Objectives

[View all topics / Hide all topics](#)

- Ch.1-Whole Numbers** [97% Mastered](#)
- Ch.3-Fractions and Mixed Numbers: Addition and Subtraction** [62% Mastered](#)
- Ch.4-Decimals** [87% Mastered](#)
- Ch.2-Fractions and Mixed Numbers: Multiplication and Division** [72% Mastered](#)
- Ch.5-Ratio and Proportion** [59% Mastered](#)
- Ch.6-Percents (Current Objective)** [48% Mastered](#)

	Mastered	Not Mastered	Ready To Learn
<b>Section 6.1 (78% Mastered)</b>			
<a href="#">Introduction to percent</a>	100%	0%	0%
<a href="#">Converting between percentages and decimals</a>	61%	39%	28%
<a href="#">Converting a percentage to a fraction</a>	84%	16%	2%
<b>Section 6.2 (94% Mastered)</b>			
<a href="#">Converting a fraction to a percentage</a>	94%	6%	2%
<b>Section 6.3 (78% Mastered)</b>			
<a href="#">Percentage of a whole number</a>	84%	16%	2%
<a href="#">Writing a ratio as a percentage</a>	63%	37%	31%
<b>Section 6.4 (13% Mastered)</b>			
<a href="#">Applying the percent equation</a>	13%	87%	28%

Instructors can use the “Show” drop-down to filter the report by “Current Learning,” “Most Recent Assessment,” or “Initial Assessment.”



If instructors click on a topic name, a sample problem for that topic will be generated to preview. Each time a topic name is clicked, a new instance of the problem will be generated. These sample problems can be used as warm-up problems for students or as examples for group sessions and lectures.

	Mastered	Not Mastered	Ready To Learn
<b>Section 6.1 (78% Mastered)</b>			
<a href="#">Introduction to percent</a>	<a href="#">100%</a>	0%	0%
<a href="#">Converting between percentages and decimals</a>	<a href="#">41%</a>	<a href="#">59%</a>	<a href="#">28%</a>
<a href="#">Converting a percentage to a fraction</a>	<a href="#">94%</a>	<a href="#">6%</a>	<a href="#">3%</a>

The sample problem displays the question at the top of the page in a blue box, and everything underneath the box is the explanation for that exact problem. The answer appears at the bottom of the page.

**Converting a percentage to a fraction**

Write 60% as a fraction in simplest form.

Percent means *per hundred*.  
We use this fact to rewrite 60% as a fraction.

$$60\% = \frac{60}{100}$$

We need to write this fraction in simplest form.  
So we divide the numerator and denominator by their greatest common factor, 20 .

$$\frac{60}{100} = \frac{60 \div 20}{100 \div 20} = \frac{3}{5}$$

The answer is  $\frac{3}{5}$  .

A list of ALEKS topics along with the current percentage of mastery is provided. Instructors can view a percentage breakdown of students who have mastered, not mastered, or are ready to learn a topic by clicking on the percentage mastered link.

**ALEKS Table of Contents** [Objectives](#)

View Course Content by ALEKS Table of Contents [View all topics / Hide all topics](#)  
 NOTE: The Mastered and Not Mastered columns add up to 100%.

<b>Whole Numbers</b>	<a href="#">95% Mastered</a>
<b>Fractions</b>	<a href="#">76% Mastered</a>
<b>Decimals, Proportions, and Percents</b>	<a href="#">73% Mastered</a>
<b>Measurement</b>	<a href="#">51% Mastered</a>

**ALEKS Table of Contents** [Objectives](#)

View Course Content by ALEKS Table of Contents [View all topics / Hide all topics](#)  
 NOTE: The Mastered and Not Mastered columns add up to 100%.

<b>Whole Numbers</b>	<a href="#">95% Mastered</a>		
<b>Fractions</b>	<a href="#">76% Mastered</a>		
<b>Equivalent Fractions (99% Mastered)</b>	<b>Mastered</b>	<b>Not Mastered</b>	<b>Ready To Learn</b>
<a href="#">Introduction to fractions</a>	<a href="#">100%</a>	0%	0%
<a href="#">Understanding equivalent fractions</a>	<a href="#">100%</a>	0%	0%
<a href="#">Equivalent fractions</a>	<a href="#">100%</a>	0%	0%
<a href="#">Introduction to simplifying a fraction</a>	<a href="#">100%</a>	0%	0%
<a href="#">Simplifying a fraction</a>	<a href="#">97%</a>	<a href="#">3%</a>	<a href="#">3%</a>
<b>Plotting and Ordering Fractions (89% Mastered)</b>			
<a href="#">Fractional position on a number line</a>	<a href="#">91%</a>	<a href="#">9%</a>	<a href="#">9%</a>
<a href="#">Plotting fractions on a number line</a>	<a href="#">59%</a>	<a href="#">41%</a>	<a href="#">31%</a>

Instructors can view a list of students who have mastered, not mastered, or are ready to learn a topic by clicking on the percentage mastery link for that specific column.

**ALEKS Table of Contents** [Objectives](#)

View Course Content by ALEKS Table of Contents [View all topics / Hide all topics](#)  
 NOTE: The Mastered and Not Mastered columns add up to 100%.

<b>Whole Numbers</b>	<a href="#">95% Mastered</a>		
<b>Fractions</b>	<a href="#">76% Mastered</a>		
<b>Equivalent Fractions (99% Mastered)</b>	<b>Mastered</b>	<b>Not Mastered</b>	<b>Ready To Learn</b>
<a href="#">Introduction to fractions</a>	<a href="#">100%</a>	0%	0%
<a href="#">Understanding equivalent fractions</a>	<a href="#">100%</a>	0%	0%
<a href="#">Equivalent fractions</a>	<a href="#">100%</a>	0%	0%
<a href="#">Introduction to simplifying a fraction</a>	<a href="#">100%</a>	0%	0%
<a href="#">Simplifying a fraction</a>	<a href="#">97%</a>	<a href="#">3%</a>	<a href="#">3%</a>
<b>Plotting and Ordering Fractions (89% Mastered)</b>			
<a href="#">Fractional position on a number line</a>	<a href="#">91%</a>	<a href="#">9%</a>	<a href="#">9%</a>
<a href="#">Plotting fractions on a number line</a>	<a href="#">59%</a>	<a href="#">41%</a>	<a href="#">31%</a>

## Send Message to Students

Instructors can send a message to students who have mastered, not mastered, or are ready to learn a topic directly from the report. They can do this by clicking on the percentage mastery link in one of the three columns and selecting the “Send message to these students” link.

For example, clicking on the percentage mastery link in the “Ready To Learn” column will show the number of students who are ready to learn the topic and their names. Instructors can send a message to this group of students by clicking on the “Send message to these students” link.

<b>Fractions</b>		<b>76% Mastered</b>		
		<b>Mastered</b>	<b>Not Mastered</b>	<b>Ready To Learn</b>
<b>Equivalent Fractions (99% Mastered)</b>				
<a href="#">Introduction to fractions</a>		<a href="#">100%</a>	0%	0%
<a href="#">Understanding equivalent fractions</a>		<a href="#">100%</a>	0%	0%
<a href="#">Equivalent fractions</a>		<a href="#">100%</a>	0%	0%
<a href="#">Introduction to simplifying a fraction</a>		<a href="#">100%</a>	0%	0%
<a href="#">Simplifying a fraction</a>		<a href="#">97%</a>	<a href="#">3%</a>	<a href="#">3%</a>
<b>Plotting and Ordering Fractions (89% Mastered)</b>				
<a href="#">Fractional position on a number line</a>		<a href="#">91%</a>	<a href="#">9%</a>	<a href="#">9%</a>
<a href="#">Plotting fractions on a number line</a>		<a href="#">59%</a>	<a href="#">41%</a>	<a href="#">31%</a>
<a href="#">Ordering fractions with same denominator</a>		<a href="#">100%</a>	0%	0%
<a href="#">Ordering fractions with same numerator</a>		<a href="#">100%</a>	0%	0%
<a href="#">Ordering fractions</a>		<a href="#">94%</a>	<a href="#">6%</a>	<a href="#">3%</a>

**Plotting and Ordering Fractions (89% Mastered)**

<a href="#">Fractional position on a number line</a>	<a href="#">91%</a>	<a href="#">9%</a>	<a href="#">9%</a>
<a href="#">Plotting fractions on a number line</a>	<a href="#">59%</a>	<a href="#">41%</a>	<a href="#">31%</a>

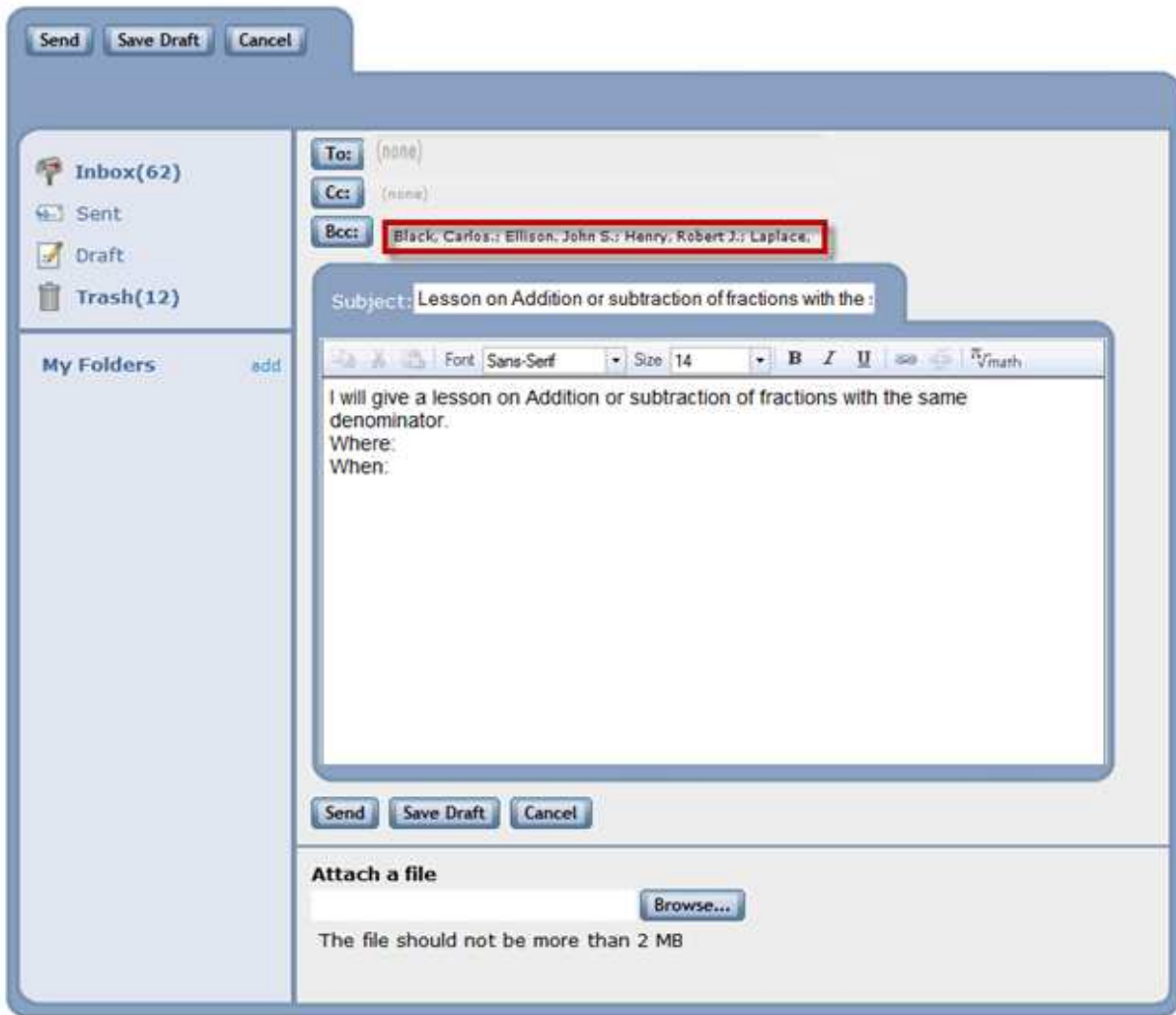
**10 students out of 32 (31%) are ready to learn this topic.**

- Black, Carlos
- Ellison, John S.
- Henry, Robert J.
- Laplace, Joel P.
- Laplace, Maria P.
- McArthur, Joel P.
- Schwarz, Nicole S.
- Topeka, Charles L.
- White, Cindy J.
- White, Kelly R.

[Send message to these students](#)

[Other topics \(31\) that these students are ready to learn](#)

The ALEKS Message Center will then open up with a blank message to the selected recipients. The instructor can edit the message before sending.



Instructors can also view additional topics that a group of students is ready to learn by clicking on the “Other topics that these students are ready to learn” link.

NOTE: This link is not available in the “Mastered” and “Not Mastered” columns and only appears in the “Ready To Learn” column.

**Plotting and Ordering Fractions (89% Mastered)**

<a href="#">Fractional position on a number line</a>	91%	9%	9%
<a href="#">Plotting fractions on a number line</a>	59%	41%	31%

**10 students out of 32 (31%) are ready to learn this topic.**

- Black, Carlos
- Ellison, John S.
- Henry, Robert J.
- Laplace, Joel P.
- Laplace, Maria P.
- McArthur, Joel P.
- Schwarz, Nicole S.
- Topeka, Charles L.
- White, Cindy J.
- White, Kelly R.

[Send message to these students](#)

[Other topics \(31\) that these students are ready to learn](#)

## **Download Excel Spreadsheet**

Instructors can download the “Average report (pie chart)” report to Excel using the “Download Excel Spreadsheet (Pie)” link. If Objectives or Modules are used in the course, the “Download Excel Spreadsheet (Objective)” link will also be available.



In summary, the “Average report (pie chart)” report allows instructors to see the exact topics that students have mastered, not mastered, and are ready to learn. This allows instructors to easily group students based on their prerequisite knowledge and to direct instruction according to what students are ready to learn.