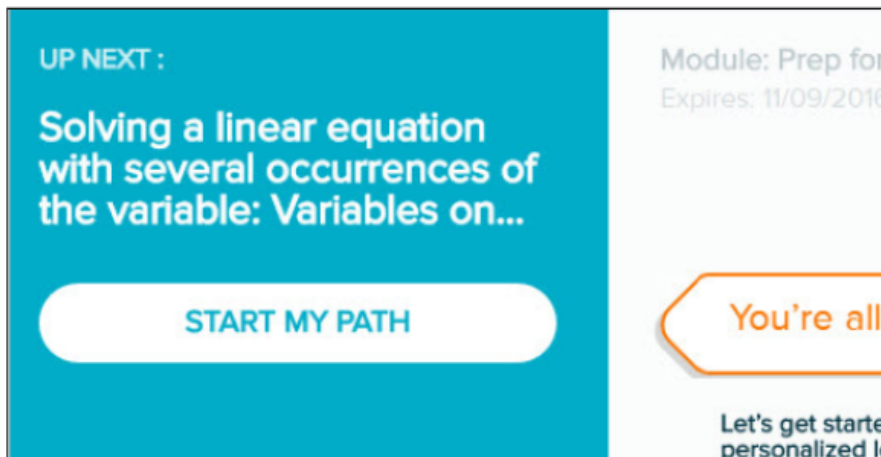


Working in the Prep and Learning Module

The Prep and Learning Module is where students practice Ready to Learn topics, and review previously learned and mastered topics to improve their knowledge. Students can start their individualized learning path from the Primary Guidance Menu by selecting **START MY PATH**.

How to Find It: Go to the Primary Guidance Menu | Select **START MY PATH**



Alternate Navigation Route: Select the Menu in the upper-left corner | Select **Learn**

Learning Page

Before starting to work on a topic, students see a learning page that provides an example of the problem and explains how to solve it. ALEKS offers quick tips when students encounter a Learning Page for the first time. The first problem in the topic begins after selecting **Start**.

QUESTION

Solve for w .

$$2(w-1) - 4 = -4(-5w+3) - 8w$$

Simplify your answer as much as possible.

EXPLANATION

We can solve the equation as follows.

$$2(w-1) - 4 = -4(-5w+3) - 8w$$

$2w - 2 - 4 = 20w - 12 - 8w$ Using the [distributive property](#) to remove parentheses.

$2w - 6 = 12w - 12$ Combining [like terms](#) on each side.

$2w = 12w - 6$ Adding 6 to each side.

$-10w = -6$ Subtracting $12w$ from each side.

$w = \frac{-6}{-10}$ Dividing each side by -10 .

$w = \frac{3}{5}$ Simplifying.

This is your Learning Page. If it is beneficial to review this material, please you start learning.

Next

Example of a Problem in Learning Mode

Below is an example of a problem in the Prep and Learning Module that points out key areas of the page with a description. For more details, please select on the links to go to the applicable section in this document.

The screenshot shows a math problem interface. At the top, a blue header bar contains a home icon (1), the text 'EXONENTS AND POLYNOMIALS' (2), 'Product rule with positive exponents: Multivariate' (3), a progress indicator (6) showing 2 out of 3 correct answers, and a user profile icon. Below the header, the problem text reads 'Multiply.' followed by the equation $3y^2v^4 \cdot 8v^6 \cdot 2y$. A red circle (4) highlights a dropdown menu. Below the equation, the instruction 'Simplify your answer as much as possible.' (5) is underlined. A text input box is provided for the answer, with a calculator icon and a toolbar containing a clear (x), undo (↶), and help (?) button. On the right side, there are icons for a calculator and a keyboard. At the bottom, there are 'Explanation' (7) and 'Check' (8) buttons.

1 | **Home:** Returns students to the homepage.

2 | **Slice Name.**

3 | **Topic Name.**

4 | **Topic Carousel Tab:** Opens/closes the Topic Carousel where students can choose other topics to work on.

5 | **Underlined Mathematical Terms:** Links to the dictionary. Students can select any term to get a complete definition.

6 | **Progress Indicator:** Displays immediate feedback messages and a counter to show how many correct answers students need in a row.

7 | **Explanation:** Opens a pop-up with an explanation of how to solve the problem. Using this button does not count against the student's score.

8 | **Check:** Checks the answer submitted by the student.

Resources Available on Problem Pages and Explanation Pages

For help on a problem or Explanation Page, students may have access to learning resources (i.e., tools on the right side of the page) such as the ALEKS dictionary or calculator (when available). Below is an example showing resources available on a problem in the Prep and Learning Module. Selecting an icon opens a pop-up with more details about the resource.

The screenshot shows a problem page titled "EXONENTS AND POLYNOMIALS" with the subtopic "Scientific notation with negative exponent". The user's name "Jano" is in the top right. The page is divided into "QUESTION" and "EXPLANATION" sections. The question asks to write 5.19×10^{-2} in standard notation. The explanation details the process of moving the decimal point two places to the left. A diagram shows the number 0.0519 with a red arrow indicating the shift. A "More" button is next to the equation $5.19 \times 10^{-2} = 0.0519$. The answer is 0.0519. On the right, a "Dictionary" pop-up is open, showing "Additional Terms" with "Powers of Ten" and "Dictionary" listed. A "More" button is also visible in the pop-up.

Progress Indicator

When students answer a problem in the Prep and Learning Module, they can immediately see how they performed. The progress indicator in the top-right corner displays messages and a counter to show when problems are answered right or wrong.

How the Progress Indicator Works

Problems are based on a point system. ALEKS considers a topic learned when a student achieves a total of 5 points per topic. The bars in the progress indicator represent how many problems the student needs to answer correctly in a row before the topic is considered learned. The student is then moved on to the next topic in the Topic Carousel. This is helpful for students as they can visually see how close they are to achieving their goal. Students receive one point for each correct answer, and one point subtracted for each incorrect answer. If two problems are answered in a row correctly without using the **Explanation Page**, double credit (2 points) is received. The number of points cannot go below zero.

The progress bars are dynamic and change colors. Bars are shaded in green based on the number of points achieved after a correct answer. The goal is for students to have a fully shaded progress indicator:



The progress indicator changes in an array of colors and moves from yellow to orange, and finally, to red with each incorrect attempt.



Sometimes students may see that their progress indicator contains three bars instead of five; this is normal. ALEKS adjusts the progress bars based on the student's knowledge of the topic. Below are examples to demonstrate how the progress indicator works.



Example #1: Student Answers an Entire Topic Correctly

1st Attempt: The student receives the first problem in the topic. The student answers correctly. The following events occur: The message “**Excellent! Keep going...**” displays by the progress indicator to motivate students

- The first bar on the progress indicator fills in with the color green
- “**+1**” point is displayed by the progress indicator
- “**Correct**” is displayed on the page
- The “**Next**” button moves the student to a new problem in the current topic

A screenshot of the ALEKS interface. The top navigation bar is blue and contains the text "EQUATIONS AND INEQUALITIES" and "Solving a linear equation with several occurrences of the variable...". On the right, it says "Excellent! Keep going..." and "+1". Below the navigation bar, there is a green button labeled "Correct" and a calculator icon. The main content area shows the instruction "Solve for x." followed by the equation $\frac{5x+4}{6} = \frac{x-3}{7} + 8$. Below the equation, it says "Simplify your answer as much as possible." and a text input field contains "x = 10". To the right of the input field are buttons for clearing, undo, and help. At the bottom, there is a green "Next" button.

2nd Attempt: The student answers the problem correctly without selecting Explanation. The following events occur:

The message “**2 in a row! Double credit!**” displays by the progress indicator to congratulate the student

- The next two bars on the progress indicator fill in with the color green
- “**+2**” points are displayed by the progress indicator
- “**Correct**” is displayed on the page
- The “**Next**” button moves the student to a new problem in the current topic

A screenshot of the ALEKS interface. The top navigation bar is blue and contains the text "EQUATIONS AND INEQUALITIES" and "Solving a linear equation with several occurrences of the variable...". On the right, it says "2 in a row! Double credit" and "+2". Below the navigation bar, there is a green button labeled "Correct" and a calculator icon. The main content area shows the instruction "Solve for v." followed by the equation $\frac{7v-4}{2} = 30 - \frac{3v+8}{8}$. Below the equation, it says "Simplify your answer as much as possible." and a text input field contains "v = 8". To the right of the input field are buttons for clearing, undo, and help. At the bottom, there is a green "Next" button.

3rd Attempt: On the next problem the student answers correctly. The following events occur:

- The message **“3 in a row!”** displays by the progress indicator to congratulate the student
- The last two bars on the progress indicator fill in with the color green
- **“+2”** points are displayed by the progress indicator
- **Correct** is displayed on the page
- The **“Next”** button student moves the student to the next topic in the Topic Carousel

The screenshot shows a math problem interface. At the top, a blue header contains the text "EQUATIONS AND INEQUALITIES" and "Solving a linear equation with several occurrences of the variable...". On the right, a progress indicator shows "3 in a row!" and a score of "12". A user name "Jane" is visible. The main content area features a green "Correct" message in a speech bubble. Below it, the instruction "Solve for w." is followed by the equation $\frac{5w-3}{2} + \frac{9w-4}{5} = 2$. A blue link "Simplify" is followed by the instruction "your answer as much as possible." A text input field contains "w = 1". To the right of the input field is a calculator icon. At the bottom, a green "Next" button is visible.

Example #2: Student Answers an Entire Topic Incorrectly

1st Attempt: The student receives the problem below and answers incorrectly. The following events occur:

- The message **“Try again...”** displays by the progress indicator
- **“Try Again”** is displayed on the page
- The student has another attempt at the same problem in the current topic
- The **“Check”** button is replaced with **“Re-Check”**

The screenshot shows a math problem interface. At the top, a blue header contains the text "EQUATIONS AND INEQUALITIES" and "Solving a linear equation with several occurrences of the variable...". On the right, a progress indicator shows "Try again..." and a score of "0". A user name "Jane" is visible. The main content area features a red "Try Again" message in a speech bubble. Below it, the instruction "Solve for u." is followed by the equation $-\frac{4}{5}u + \frac{2}{5} = -5u - \frac{1}{3}$. A blue link "Simplify" is followed by the instruction "your answer as much as possible." A text input field contains "u = 2". To the right of the input field is a calculator icon. At the bottom, two buttons are visible: "Explanation" and "Re-Check".

2nd Attempt: The student answers incorrectly. The following events occur:

- The progress indicator turns yellow
- **“Incorrect. Try reading the explanation first, then continue”** is displayed on the page
- The Explanation Page for the current problem is shown
- After two missed attempts at the same problem, the **“Continue”** button takes the student to a new instance of the problem in the current topic

EQUATIONS AND INEQUALITIES
Solving a linear equation with several occurrences of the variable...

Incorrect. Try reading the explanation first, then continue.

QUESTION

Solve for u .

$$-\frac{4}{5}u + \frac{2}{5} = -5u - \frac{1}{3}$$

Simplify your answer as much as possible.

EXPLANATION

We first eliminate all the fractions in the equation. To do this, we multiply both sides of the equation by the LCD of the fractions.

The LCD of $\frac{4}{5}$, $\frac{2}{5}$, and $\frac{1}{3}$ is 15. How do we find the LCD?

So, we multiply both sides by 15.

$$15\left(-\frac{4}{5}u + \frac{2}{5}\right) = 15\left(-5u - \frac{1}{3}\right)$$

We then apply the distributive property and simplify.

$$15\left(-\frac{4}{5}u\right) + 15\left(\frac{2}{5}\right) = 15(-5u) - 15\left(\frac{1}{3}\right)$$

$$-12u + 6 = -75u - 5$$

Finally, we solve this last equation for u .

$$-12u + 75u + 6 = -5$$

$$-12u + 75u = -5 - 6$$

3rd attempt: The student receives a new instance of the problem. The student answers incorrectly. The following events occur:

- The message “**Try again...**” displays by the progress indicator
- “**Try Again**” is displayed on the page
- The student has another attempt at the same problem in the current topic
- The “**Check**” button is replaced with “**Re-Check**”

EQUATIONS AND INEQUALITIES
Solving a linear equation with several occurrences of the variable... Try again ... Jane

Try Again

Solve for u .

$$5u - \frac{1}{4} = -\frac{7}{3}u - \frac{5}{3}$$

Simplify your answer as much as possible.

$u = 4$

Explanation Re-Check

4th Attempt: The student answers incorrectly. The following events occur:

- The progress indicator turns orange
- “Incorrect. Try reading the explanation first, then continue” is displayed on the page
- The Explanation Page for the current problem is shown
- After two missed attempts at the same problem, the “Continue” button takes the student to a new instance of the problem in the current topic

The screenshot shows a math problem interface. At the top, it says "EQUATIONS AND INEQUALITIES" and "Solving a linear equation with several occurrences of the variable...". A progress indicator is orange. A message box says "Incorrect. Try reading the explanation first, then continue." The problem is to solve for u in the equation $5u - \frac{1}{4} = -\frac{7}{3}u - \frac{5}{3}$. The explanation starts by finding the LCD of the fractions, which is 12. It then shows the steps to solve the equation: multiplying both sides by 12, applying the distributive property, and simplifying to get $60u - 3 = -28u - 20$.

QUESTION

Solve for u .

$$5u - \frac{1}{4} = -\frac{7}{3}u - \frac{5}{3}$$

Simplify your answer as much as possible.

EXPLANATION

We first eliminate all the fractions in the equation. To do this, we multiply both sides of the equation by the LCD of the fractions.

The LCD of $\frac{1}{4}$, $\frac{7}{3}$, and $\frac{5}{3}$ is 12. How do we find the LCD?

So, we multiply both sides by 12.

$$12\left(5u - \frac{1}{4}\right) = 12\left(-\frac{7}{3}u - \frac{5}{3}\right)$$

We then apply the distributive property and simplify.

$$12(5u) - 12\left(\frac{1}{4}\right) = 12\left(-\frac{7}{3}u\right) - 12\left(\frac{5}{3}\right)$$
$$60u - 3 = -28u - 20$$

Finally, we solve this last equation for u .

$$60u + 28u - 3 = -20$$
$$60u + 28u - 20 + 3$$

5th Attempt: The student receives a new instance of the problem. The student answers incorrectly. The following events occur:

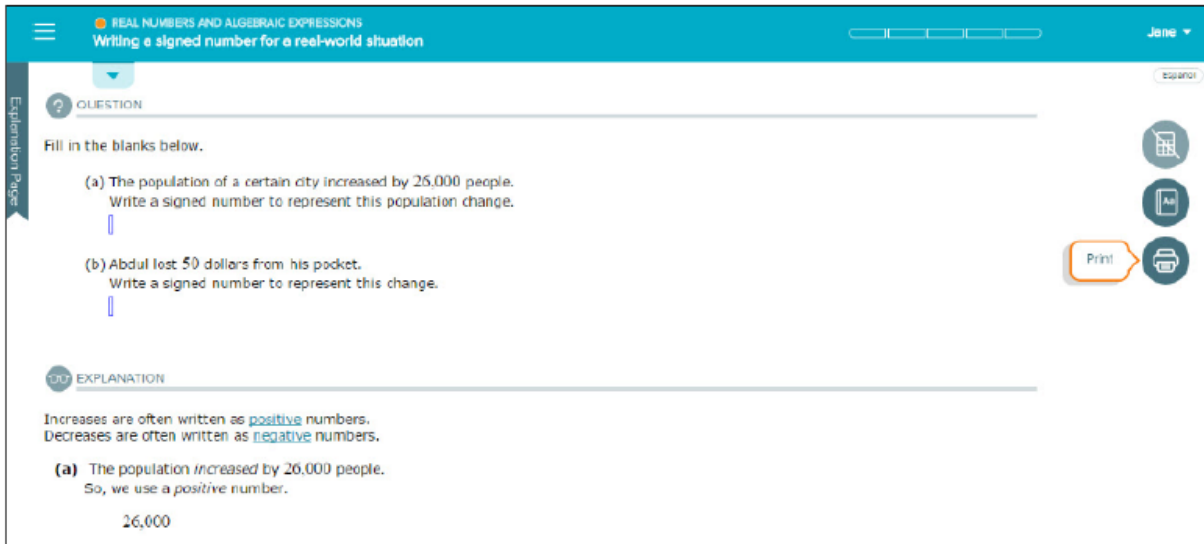
- The progress indicator turns red
- “**Let’s Take a Break.** Your answer is incorrect.” is displayed on the page
- The correct answer is presented on the page
- The “**Work on Something Else**” button, directs the student to take a break from the current topic he/she is struggling with and try a new one. The current topic is moved to the last card in the Topic Carousel and the student starts on the next topic in the carousel.

Explanation Page

Students can view a detailed explanation of how to solve the problem after selecting **Explanation**. Blue underlined words within the explanation link to the dictionary. Students can select Print to receive a formatted PDF version of the explanation for that topic instance.

Topic Carousel

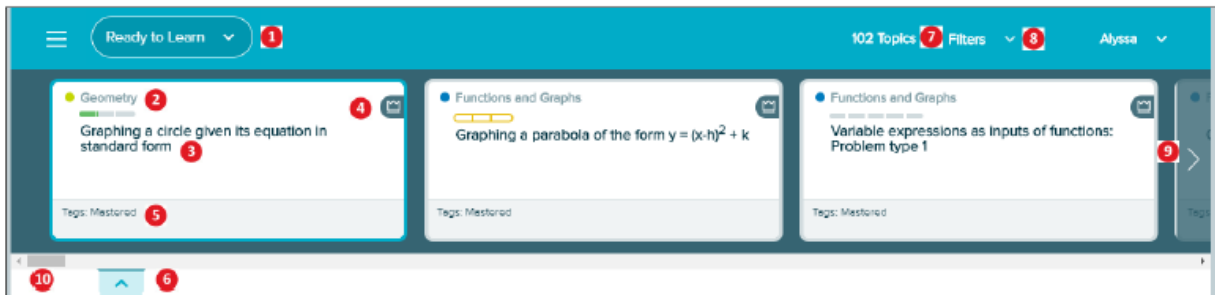
In the Prep and Learning Module, students can access the Topic Carousel by selecting the downward arrow tab.



Topics are sorted from easiest to hardest so students first work on topics with the highest likelihood of being learned and retained. Each topic has its own card containing the slice name, the topic name, and attributes (if any). The Topic Carousel shows three cards at a time and is easy to scroll through by using the scroll bar or back/ forward arrow. ALEKS offers quick tips when students encounter the Topic Carousel for the first time.

How to Find It: Go to Learning Mode | Select the Topic **Carousel pull-down** tab

Below are some key areas of the Topic Carousel with an overview description of each area. More details about each feature are provided in respective sections in this document.



- 1 | **Ready to Learn Drop-Down Menu:** Allows students to see progress in Ready to Learn pie slices. It is also used to navigate to other pie slices.
- 2 | **Slice Name.**
- 3 | **Topic Name.**
- 4 | **Topic Icons:** Appear as applicable to display quick information about the topic. Selecting the icon slides it to the left and displays the icon label.
- 5 | **Tags:** Topics are tagged to display attributes (if any). (e.g., Previously Mastered, Needs More Practice).
- 6 | **Topic Carousel Tab:** Opens/closes the Topic Carousel.
- 7 | **Number of Topics:** Displays the number of topics that are loaded in the Topic Carousel.
- 8 | **Topic Carousel Filter:** Opens a filter menu to allow students to sort or filter the Topic Carousel by tags.
- 9 | **Right Arrow:** Use to scroll through a set of three topics at a time. Tip: Double clicking or tapping on the arrows go to the start/end of the list.
- 10 | **Scroll:** Use to quickly scroll through topics.

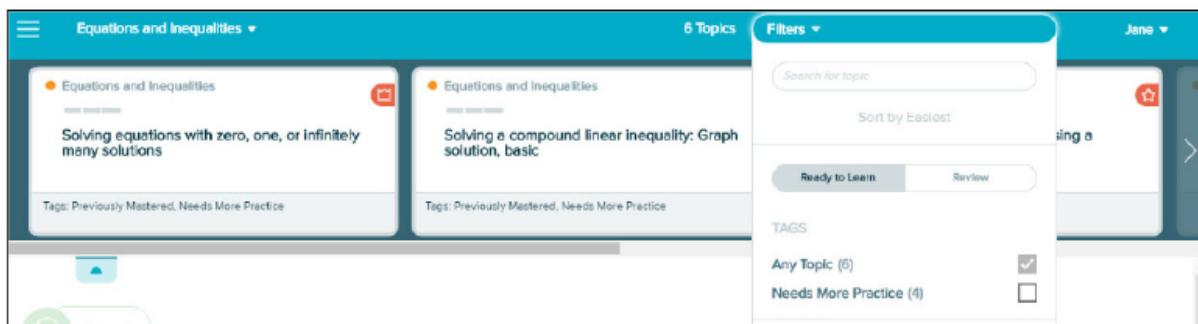
How to Switch Topics

Topics can be switched at any time by selecting a new topic card in the **Topic Carousel**. After selecting a card, a sample problem is available for preview in the bottom half of the window. Students can begin working on the new topic after selecting **Start** from the Learning Page or the Preview.

Note: Switching topics mid-way through working on a topic will not cause students to lose their work. ALEKS remembers the progress made on the topic and the next time students return to that topic, they can resume where they left off.

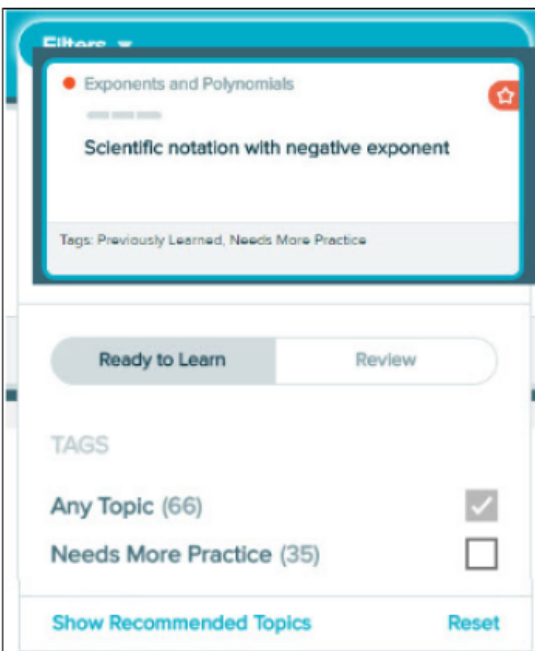
Topic Carousel Filter

The Topic Carousel is useful for filtering specific topics, reordering topics in the carousel, or filtering topics by specific attributes, such as needs more practice, goal topic, etc. Students can also enter words to search for topics by name. Topics are tagged to display attributes (if any). Here is an example of a topic that is tagged with attributes.



How to Find It: Go to Learning Mode | Select **Filters** in the upper-right corner

By default, the Topic Carousel is sorted from the easiest to hardest Ready to Learn topics. However, if students prefer to work on Ready to Learn topics by pie slice, they can use the filter to reorder the Topic Carousel by selecting Pie Slice. By default, the **Show All Topics** filter is selected to show all Ready to Learn topics in the Topic Carousel. Students can select **Show Recommended Topics** to filter the Topic Carousel to approximately 30 topics and focus on a limited amount of problems.

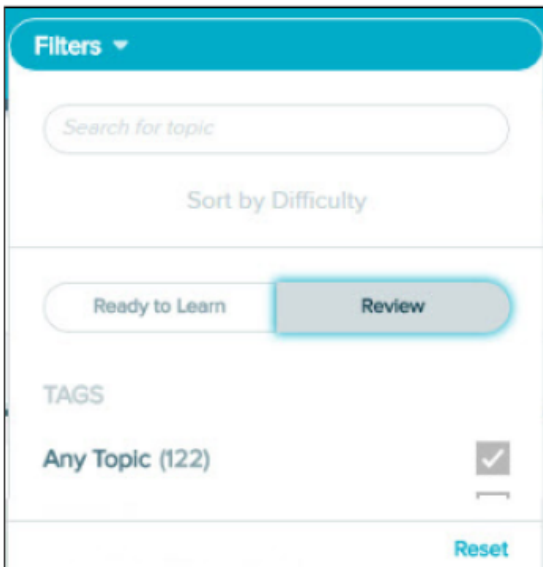


Note: The sort setting is saved until a change is made, meaning that if the filter default settings are modified, they will remain as such until the student resets or updates the filter or logs out of ALEKS.

Review Filter

By default, the Topic Carousel displays Ready to Learn topics. However, if students want to review and practice previously learned and mastered topics, they can use the filter to load the Topic Carousel with review topics by selecting Review.

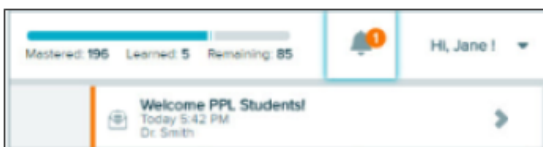
How to Find It: Go to the Prep and Learning Module | Select **Filters** | Select **Review**



Alternate Navigation Route: Select the Menu in the upper-left corner | Select **Review**

Notifications

Notifications appear on the homepage or in Learning Mode. The notification appears in the upper-right corner of the page the student is currently on.



Most notifications are actionable and students can navigate to the corresponding content by selecting on the notification. For example, students can select on a new message notification to open the message in the ALEKS Message Center. Notifications must be closed with the X button. They do not close on their own and will stay open until closed by the student or when the student navigates to a different screen.

