

Pre-Core Mathematics Program



MOTTO: Let's Do The Math!

Class #2 in the Pre-Core Mathematics Program

Today we will follow our motto "Let's Do the Math!" But before we get started, I want to pass along a few very important items related to the course and program

The screenshot shows the ALEKS user interface. At the top, the ALEKS logo is on the left and the user name 'Tracy Watson' is on the right. Below the logo, there is a welcome message: 'Welcome back, Tracy!' followed by instructions to click on active classes or sign up for a new class. A green button labeled 'Sign up for a new class' is visible. Below this, a section titled 'ACTIVE (1)' contains a list of active classes. The first class is 'University of Arkansas--Little Rock' with the title 'Beginning and Intermediate Algebra Combined / Pre-Core Math Modules 1 & 2 - Section 02'. The class details include 'Instructor: Inst. Watson', 'Last Login: 08/27/2012', and 'Expiration Date: 09/07/2012'. A red arrow points to the 'Expiration Date' field. To the right of the class title is an 'Actions' button. At the bottom of the screenshot, the text 'Temporary Access Code' is displayed in a large, bold font, underlined.

If you registered in ALEKS using the temporary access code, you have two weeks from the day you registered to enter a purchased access code. Extending your access can be done at any time from the account home page. Don't wait until your account expires # to purchase an access code. In two weeks, the attendance policy is completing enforced and an expired account isn't an excuse to miss the required weekly work hours in ALEKS. Now, let's take a look at how to enter a purchased access code.

ALEKS® Tracy Watson ▾

Welcome back, Tracy!

Click on one of your active classes to continue working on ALEKS or click on "Sign up for a new class" to enroll in a new class.

Sign up for a new class

ACTIVE (1)

University of Arkansas--Little Rock

Beginning and Intermediate Algebra Combined / Pre-Core Math Modules 1 & 2 - Section 02

Instructor: Inst. Watson
Last Login: 08/27/2012
Expiration Date: 09/07/2012

Actions ▾

Switch to a new class

Extend access to this class

Extend your account

From the 'account home' page, click on the 'ACTIONS' button next to the name of your class and select 'Extend access to this class'. You will be asked to enter your purchased access code and by clicking 'submit' your account will be extended for the full length of time.

Again, you must get this taken care of before the two week temporary access expires...or you won't be able to "do the math".

For the specific date of current expiration, # look at the information listed under the course on the account home page.

ALEKS HELP WORKSHEET INBOX REPORT OPTIONS RESOURCES English Tracy Watson

MyPie Review Dictionary Calculator Assignments Gradebook Calendar Beg. and Int. Algebra

Beginner and Intermediate Algebra Combined

MyPie Course Mastery (61 of 81 Topics) Need Help?

Radicals and Rational Exponents (1 of 1)

Real Numbers and Linear Equations (22 of 28)

Arithmetic Readiness (38 of 52)

The ALEKS pie shows your learning progress. As you learn new topics, the pie slices are filled with the darker colors. Keep working on new topics until you have mastered all of them.

Click on MyPie at any time to return to your pie chart. For more information, click on "Report."

Do the Math = ALEKS MyPie

Now, let's talk about 'doing the math' in ALEKS.

For this class, 'doing the math' or 'doing homework' is working in the MyPie. The MyPie icon is in the upper left hand corner and will display YOUR MyPie that was generated from the initial assessment. Everyone's MyPie will look different because we all come to the class with different math knowledge....and hence, we will each have different math homework. To begin working on YOUR math, look for a small arrow in front of a slice title. For my MyPie, two slices have an arrow in front of them. ## This indicates that there are topics that I am 'ready-to-learn' in these slices. When I hover my mouse over a slice, ...

Choose Topic

A pop-up window appears with a list of topics. I can select any of these topics to work...because I am 'ready-to-learn' these topics. It is my decision which topic to work first....eventually I will need to work all of them. So, I'm going to select 'Exponents and integers'. By clicking on the topic....

Mastery in Learning Mode

This moves me into the learning mode of ALEKS where I “do the math” or “do problems” until ALEKS has determined the topic is ‘mastered’ – which means ALEKS believes I know it! If you have no idea how to approach the problem, # click the EXPLAIN button.

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HELP | HOMESET | INFO | REPORT | OPTIONS | RESOURCES | English | Tracy Watson

MyPie | Review | Dictionary | Calculator | Assignments | Gradebook | Calendar | Exp. and Int. Algebra

Print

Exponents and integers: Problem type 1

Evaluate

$$(-6)^2 = \square$$

$$(-3)^3 = \square$$

Click on the following for more information: "Integer".

We must evaluate **exponential expressions** of the form a^n .
 When the **base** a is negative, we use the following rule:

If the exponent n is **even**, then a^n is positive. Why?

If the exponent n is **odd**, then a^n is negative.

- $(-6)^2 = (-6) \times (-6) = 36$ The exponent 2 is even, so the answer is positive.
- $(-3)^3 = (-3) \times (-3) \times (-3) = -27$ The exponent 3 is odd, so the answer is negative.

Here is the answer.

$$(-6)^2 = 36$$

$$(-3)^3 = -27$$

Practice

Additional Resources

Beginning and Intermediate Algebra, 1st Ed.
Hendricks/Chow

Chapter 1: Real Numbers and Algebraic Expressions
Section 1.6: Multiplication and Division of Real Numbers

▶ [Trouble Shooting: Multiplication and Division of Real Numbers](#)

[Supplementary Resources](#)

You will find a detailed explanation for the problem along with supplemental resources like videos, textbook pages, and animations to help you understand the concept. All of these items are intended to help the problem make sense to you. You should take notes when you are working through the explanations. When you think you've gotten it, click the PRACTICE button and try it!

The screenshot shows the ALEKS interface. At the top, there is a navigation bar with the ALEKS logo and various menu items: HELP, WORKSHEET, INBOX, REPORT, OPTIONS, RESOURCES, English, and Tracy Watson. Below this is a secondary navigation bar with icons for MyPie, Review, Dictionary, Calculator, Assignments, Gradebook, and Calendar. The main content area is titled "Evaluate" and contains two math problems: $(-5)^3 =$ and $(-8)^2 =$. Each problem has a vertical input field next to it. To the right of the input fields are buttons for "Clear", "Undo", and "Help". Below the input fields are buttons for "Next >>" and "Explain".

Mastery in Learning Mode

You need to get 2-3 problems correct in a row, for ALEKS to judge you have the problem mastered. Depending on your accuracy, you may have to work 3 problems...or 5 problems...or 10 problems all together. It depends how much practice YOU need.

The screenshot shows the ALEKS interface for a math problem. At the top, the ALEKS logo is on the left, and navigation links like HELP, WORKSHEET, INBOX, REPORT, OPTIONS, and RESOURCES are on the right. Below this is a secondary navigation bar with MyPie, Review, Dictionary, Calculator, Assignments, Gradebook, and Calendar. The main content area is titled "Exponents and integers: Problem type 2". It contains an "Evaluate" section with two problems: $-(-6)^3 = \square$ and $-8^2 = \square$. Below these is the "Answer:" section with the solutions: $-(-6)^3 = 216$ and $-8^2 = -64$. To the right of the problem area is a yellow feedback box that says "Very Good! You seem to have learned this question. To practice it again click on 'More Practice.' Otherwise, click on 'Done' to return to your pie." At the bottom of the problem area are two buttons: "Done" and "More Practice". The "More Practice" button is highlighted with a red rectangle. Below the problem area is a large grey banner with the text "Done – or – More Practice" in bold black font, underlined.

When you have gotten the problem correct enough times in a row, ALEKS determines you have mastered the topic in the learning mode and are ready for a new one. BUT you can practice one or two more time by clicking the # MORE PRACTICE button if you like. Otherwise, clicking the DONE button will

The screenshot shows the ALEKS MyPie interface for a user named Tracy Watson. The page title is "Beginning and Intermediate Algebra Combined". A navigation bar includes links for MyPie, Review, Dictionary, Calculator, Assignments, Gradebook, and Calendar. A "Need Help?" link is visible in the top right. The main content area features a pie chart representing course mastery. The chart is divided into three segments: a small pink segment for "Radicals and Rational Exponents (1 of 1)", a larger green segment for "Arithmetic Readiness (38 of 52)", and a medium green segment for "Real Numbers and Linear Equations (23 of 28)". A red box highlights the text "Course Mastery (62 of 81 Topics)" above the chart. Below the chart, the text "Topic added to MyPie Mastery" is displayed in a large, bold, black font, underlined.

return you to YOUR MyPie. # Notice, the topics mastered has increased by one! And you are ready to make another topic selection to continue “doing the math!”

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MyPie Review Dictionary Calculator Assignments Gradebook Calendar Beg. and Int. Algebra

Beginning and Intermediate Algebra Combined

MyPie Course Mastery (62 of 81 Topics) [Need Help?](#)

Radicals and Rational Exponents (1 of 1)

► Real Numbers and Linear Equations (23 of 28)

Real Numbers and Linear Equations [X]

Signed Numbers
[Plotting rational numbers on a number line](#)
[Signed fraction addition: Advanced](#)
[Signed fraction multiplication with three numbers](#)
[Mixed arithmetic operations with integers](#)

► Arithmetic Readiness (38 of 52)

Work on another topic...

Again, you can select any topic you like...eventually you will be working the topics to complete the odd or even module in the MyPie. But the path to completion is up to you.

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Let's take a look at the REPORT link at the top of the window. # When you click the REPORT link

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MyPie Review Dictionary Calculator Assignments Gradebook Calendar Beg. and Int. Algebra

Parents

History

	Last assessment	Assessment performance Course Mastery Show: Percent / Topics	Learning data since last assessment		
			Topics learned since last assessment	Hours in ALEKS since last assessment	Topics learned per hour since last assessment
Initial Assessment	08/23/2012	75 +0 %	0	-	-

Legend: Assessment (blue), progress in learning mode (green), still to learn (yellow), assessment not completed (grey), not assessed in this domain (white)

Learning report: This pie chart shows your recent learning on the date selected. Your knowledge is tested from time to time by an ALEKS assessment. To see your assessment results, select an "Assessment" report above.

Done

Blue = Assessment, Green - Learning

and scroll down, down, down to the bottom of the page, you will see the bar with blue/green numbers that are referenced in the syllabus. These numbers represent the mastery you have shown in the current MyPie. The BLUE number is the mastery demonstrated on an assessment. The GREEN number is the mastery demonstrated in the learning mode...it represents the amount of topics you have completed in the MyPie. Remember, these numbers are referring to the current MyPie...which for most of you is Modules 1 & 2.

For now, I want you to take a look at your report after this announcement and pay attention to your BLUE and GREEN numbers. Let's remind ourselves of the usefulness of this information...completing a module...

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MyPie Review Dictionary Calculator Assignments Gradebook Calendar Beg. and Int. Algebra

Reports

History

Last assessment	Assessment performance Course Mastery Show: Percent / Topics	Learning data since last assessment		
		Topics learned since last assessment	Hours in ALEKS since last assessment	Topics learned per hour since last assessment
Initial Assessment 08/23/2012	75 +0 %	0		

Legend: Assessment (blue), progress in learning mode (green), topics learn (yellow), assessment not completed (grey), not assessed in this domain (grey)

Learning report: This pie chart shows your recent learning on the date selected. Your knowledge is tested from time to time by an ALEKS assessment. To see your assessment results, select an "Assessment" report above.

Done

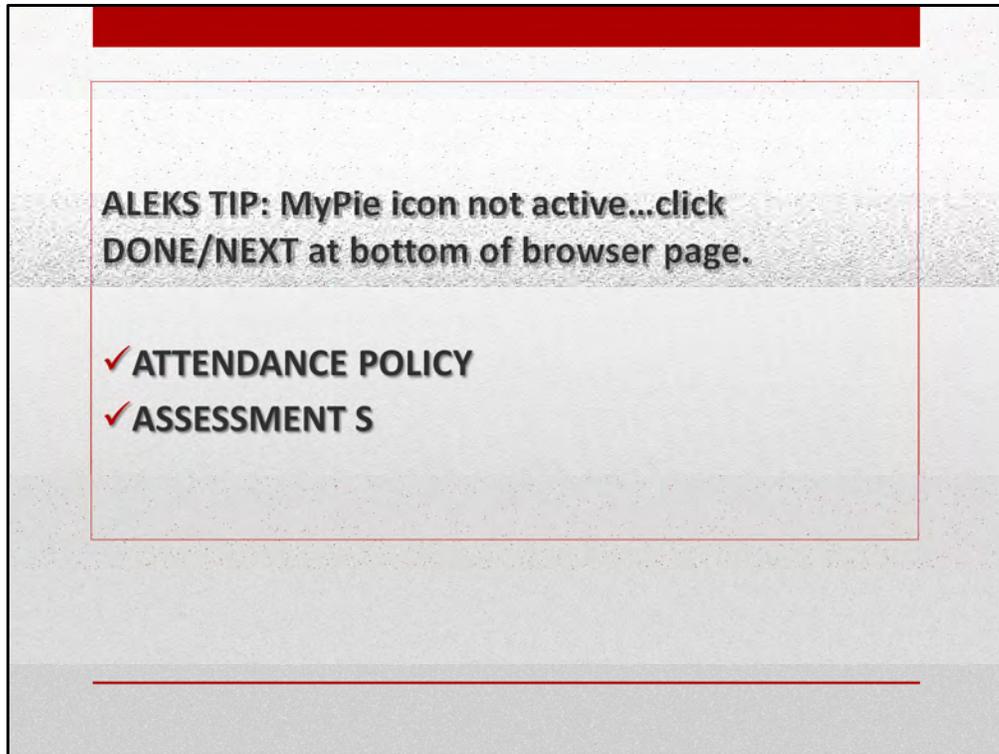
Blue = Assessment, Green - Learning

If your BLUE & GREEN numbers add up to be below 59%, then you are working on the odd module. To complete an odd module, you are working towards a total of 59%.

If your BLUE & GREEN numbers add up to be above 59%, then you are working on the even module. To complete an even module, you are working towards a total of 100%.

The GREEN number will increase as you work in your MyPie. Notice, you can change the display from percentage to topics by clicking on the link above the bar...but the syllabus criteria reference the percentage values.

When you are finished looking at the Report, you need to click the DONE button to close the Reports page.



Giving us our first general “ALEKS tip”...if you are trying to click the MyPie icon and it’s not active, you are probably in an area of ALEKS that needs closed. Scroll down to the bottom of the page, and look for a DONE or NEXT button.

Now, we have discussed how to extend your access to ALEKS if you are on a temporary account, the MyPie – where you ‘do your math’ – and reading your ALEKS report. Today we will take a look at two more items that are important for the class, the attendance policy and assessments.

5 Attendance Strikes = Administrative withdraw

Attendance strikes are earned:

- Not attending class or registering in ALEKS by the 10th day of UALR classes = 5 strikes
- Missing class or more than 5 minutes late = 1 strike
- Spending less than 6 quality math hours in ALEKS each week = 1 strike (for the online section, it's 8 hours each week)

ATTENDANCE is required.

The attendance policy....attendance is required. You must attend class or you will receive an attendance strike. And when you accumulate 5 strikes, you may be withdrawn from the course. But you can also earn an attendance strike by not putting enough quality time into “doing the math” (logging into ALEKS). So, it will be important for you to monitor the amount of time you are spending in ALEKS. During the first day of class, you received a ‘blank progress report’ handout...

Pre-Core Mathematics Progress Report

Report for _____ for Fall 2013 semester

Facilitator: _____ Course-Section: _____ - _____ Day/Time: _____

Hours in ALEKS		Hours in ALEKS	
FYI: Aug 19 to Aug 25		Oct 23 to Oct 29	
Aug 26 to Sept 2		Oct 30 to Oct 30	
Sept 3 to Sept 9		Oct 31 to Nov 6	
Sept 10 to Sept 16		Nov 7 to Nov 13	
Sept 17 to Sept 23		Nov 14 to Nov 20	
Sept 24 to Sept 30		Nov 21 to Dec 2	
Oct 1 to Oct 7		Dec 3 to Dec 9	
Oct 8 to Oct 16			

TIP: Use the dates in the table when you are changing the 'date range' of the ALEKS time/topic report.

Weekly ALEKS hours

You will want to keep this blank report handy. Today, we will use it for the information related to the # HOURS IN ALEKS. The table lets you know the start and end of OUR week. The first week of classes isn't factored into attendance strikes because students are given time to orient themselves and find the "places" outside of class to "do the math." But the time will be placed on future progress reports distributed to you. A week is seven days long, but we may have holidays and campus closed days scheduled during the semester. During these days, you won't be expected to work in ALEKS...but you can if you like. But this is why some of the weeks may be longer than 7 days. Now, what you need to know is how to find how long you've been working in ALEKS. The official ALEKS time is given to use by ALEKS. So,

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REPORT page

After you have logged into your ALEKS class, go to the REPORT page.

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MyFile Review Dictionary Calculator Assignments Gradebook Calendar Beg. and Int. Algebra Print

Report for Tracy Watson

Beginning and Intermediate Algebra Combined
Pre-Core Math Modules 1 & 2 – Section 02 (Inst. Watson)

Pie Report Common Core Standards **Time and Topic**

08/29/2012 Learning 08/29/2012 Learning OK

Total time spent on ALEKS (as of 08/29/2012): 2 hours 26 minutes

Course Mastery (68 of 81 Topics)

Radicals and Rational Exponents (1 of 1)

► Real Numbers and Linear Equations (27 of 20)

► Arithmetic Readiness (40 of 52)

Time and Topic Report

Switch to the “Time and Topic” report by clicking on the TIME AND TOPIC tab.

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HyPie | Review | Dictionary | Calculator | Assignments | Gradebook | Calendar | Bcg. and Int. Algebra

Report for Tracy Watson

Beginning and Intermediate Algebra Combined
Pre-Core Math Modules 1 & 2 – Section 02 (Inst. Watson)

Pre Report | Common Core Standards | Time and Topic

Report from 08/15/2012 to 08/29/2012 (Change Date Range) Refresh Report

Date	Time Spent in ALEKS [2]	Topics Attempted [2]	Topics Mastered
8/29/12	44 minutes	4 topics	3 topics
8/28/12	-	-	-
8/27/12	2 hours 37 minutes	26 topics	26 topics
8/26/12	-	-	-
8/25/12	-	-	-
8/24/12	55 minutes*	8 topics	8 topics
8/23/12	-	-	-
8/22/12	-	-	-
Total for this period	4 hours 16 minutes	38 topics	37 topics

(* The student spent some time on an ALEKS assessment during that day.)

The report will indicate the # time you've worked in ALEKS each day, the number of topics attempted, and the # number of topics mastered (added to your MyPie total). Each class meeting, after you have watched the announcement for the day, you should look at your ALEKS time and topic report to see how much time you've spent for OUR week.

You will also notice that at the bottom of the page, you have a total for the date range that is being displayed. If you change this date range to match "OUR WEEK" then you can quickly see the total for the week. Just remember, you must log in at least 6 quality math hours for each of OUR WEEKS. For those registered in the totally online sections, you are required to spend at least 8 hours each week!

Notice the other information shown on this report...the number of topics attempted and mastered during the time you are logged into the system. If you are spending A LOT of time and not mastering many topics, this indicates that YOU NEED TO ASK FOR HELP or your time on task is not quality math time. We want your time spent in ALEKS to be productive...that is, making progress in the content!

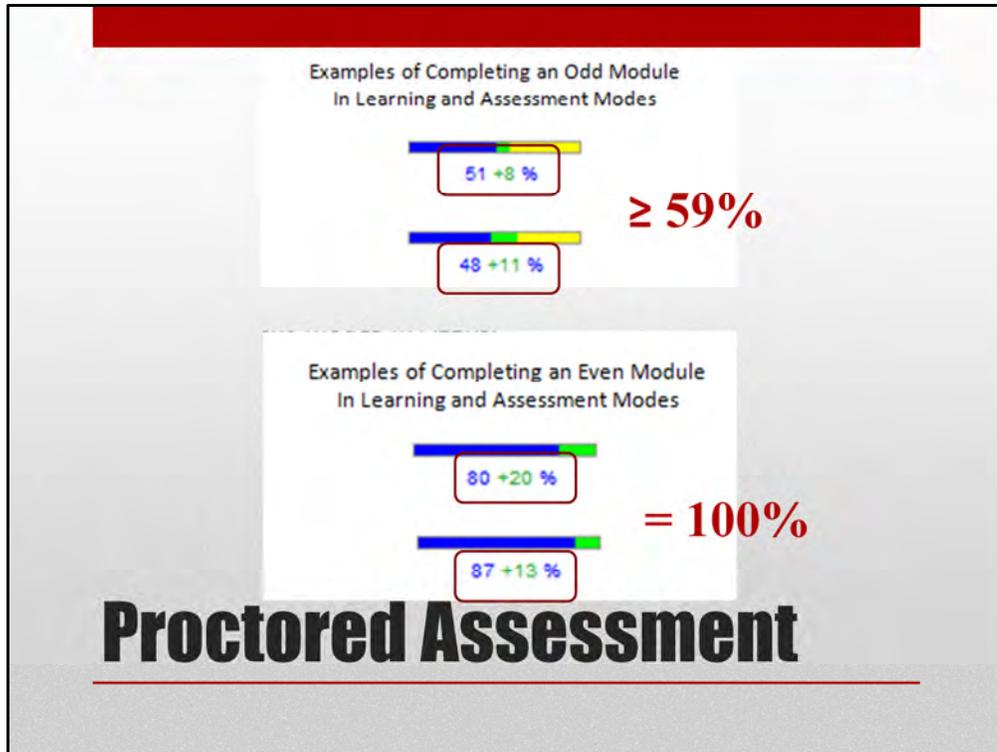
- Proctored Assessment
 - Monitor
 - Classroom facilitator is present
 - Used to demonstrate mastery of a module to US
- Progress Assessment
 - Triggered automatically by ALEKS
 - On your own
 - Treat like a test – no help of any kind (including notes)

Proctored versus Progress Assessment

Finally, let's talk about the difference between a proctored assessment and a progress assessment. # A proctored assessment is an ALEKS assessment that is taken in a monitored setting....where a classroom facilitator is present in the room with you. # A progress assessment is an ALEKS assessment that is triggered automatically in ALEKS because you have mastered enough topics that your learning needs to be re-checked. These do not have to be done in a monitored setting.

Progress Assessment – automatically triggered by ALEKS – can be taken on your own, but you need to treat them like a monitored one – no notes or help of any kind. Why ALEKS triggers an assessment will be discussed in detail in a later class meeting.

Proctored Assessment – monitored by US – these are to be taken at the end of a module for you to demonstrate to US that you have mastered the module.



When you complete a module, you are ready for a proctored assessment to show US your mastery of that module.

Remember, an odd module is complete when you have shown mastery in assessment (BLUE number) and learning (GREEN number) mode of at least 59% of the MyPie. Odd module = $\geq 59\%$

An even module is complete when you have shown mastery in assessment and learning mode of 100% of the MyPie.

When this happens, you are ready to take a proctored assessment!!!

❖ **Proctored Assessment Schedule**

❖ **Rules for Taking a Proctored Assessment**

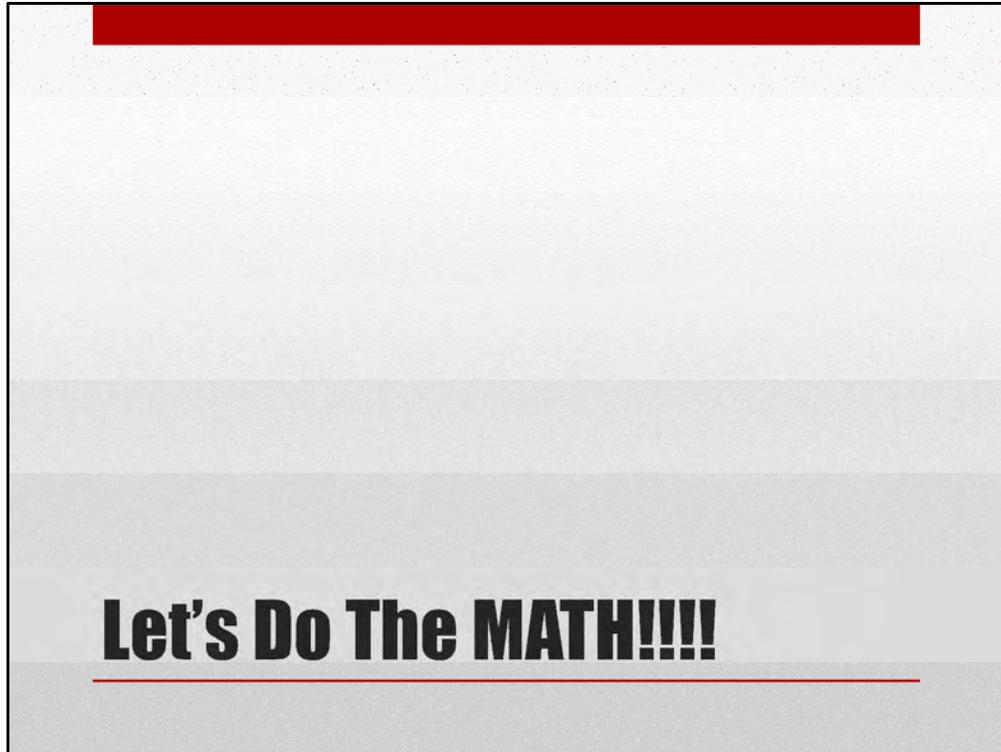
- Picture ID is required.
- ALEKS Calculator only.
- All belongs (except writing utensil) must be placed away from your testing area.
- No notes or help of any kind.

❖ **While waiting, review and practice the math!**

Proctored Assessment Schedule

There is no need to make an appointment or tell your classroom facilitator. Just come with your picture ID and completed module. Be sure to look at the schedule which was given to you the first day of class.

While you are waiting on the proctored assessment time to come around...keep working in ALEKS and practice the math. There is a REVIEW button that lets you go back to topics you've mastered and try them again. There are batch of "practice problems" under the ASSIGNMENTS tab too..just to be sure you've got it.



Now, it's time for you to get busy..."doing the math!" When you have trouble with a problem, there are people in the room to assist you. BUT you need to try first...it's YOUR MATH.

Have a great class!