

MATH 041 Content / Prerequisite Content for MATH 140

About ALEKS - ALEKS is a web-based, artificially intelligent assessment and learning system. ALEKS uses adaptive questioning to quickly and accurately determine exactly what a student knows and doesn't know regarding mathematics. ALEKS then provides instruction on the topics the student is most ready to learn. ALEKS also provides the advantages of one-on-one instruction, 24/7, from virtually any web-based computer for a fraction of the cost of a human tutor.

This ALEKS course covers many of the topics covered in MATH 041. You may get a head-start on MATH 041 concepts with ALEKS. Students who **complete** the MATH 041 content provided by ALEKS **may** be ready to enroll in MATH 140 at Penn State. **Note that completing this material in ALEKS does NOT give you credit for MATH 041.** You may send a message to the Mathematics Department through ALEKS asking for advice based on your work.

The two main parts of ALEKS are the Assessment Mode (determining what you know and don't know) and the Learning Mode (where you work problems). ALEKS will automatically assess you after every 10 hours or every 20 objectives to insure that you retain the knowledge you have gained.

Registration

1. Before you begin, you will need to register with ALEKS.
2. Go to <http://www.aleks.com>.
3. Click on "New User, Sign Up Now!" on the upper left corner of the page.
4. Enter the course code: XGAAK-FMAGL
5. Confirm your course information (Prep-UP / Prep for Calculus / Math 041 Content).
6. Click on "Purchase an Access Code Online" and follow the instructions to pay with a credit card. Purchase "Aleks Math (6 weeks)" for \$30.
7. Complete the registration process. You will now be ready to have a quick tutorial.
8. Take the Assessment after reading the directions below.

ALEKS Plug-in

The ALEKS plug-in is used by your browser when you are logged on to ALEKS. It is inactive at other times, and does not do anything except provide functionality for ALEKS. However, if you remove the ALEKS plug-in from your computer, you won't be able to access ALEKS on that computer until you re-install it. This is a safe operation for your computer.

Using ALEKS

Once you register, you will be guided through a 10-minute tutorial that will help you to become familiar with the ALEKS system.

After the tutorial, you will take an initial placement assessment in the ALEKS "Assessment Mode." The assessment will create a precise understanding of your knowledge of mathematics. Try to answer each question to the best of your ability. If you do not know the answer, just click "I don't know." Answering questions correctly during your assessment will enable you to avoid repeating these topics later in ALEKS.

Once your placement assessment is complete, the "My Pie" report will show you precisely how much of each topic area you know and what you are most ready to learn next. You can navigate the pie chart to enter the ALEKS "Learning Mode." Once you begin learning topics ("Practice"), ALEKS will provide you with feedback on your answers and will inform you of how many times you need to answer this type of question correctly to add the item to "My Pie." If you need help with a problem, just click on "Explain." Once you see the solution, you can rework a similar problem that contains different variables.

Occasionally, ALEKS may trigger another assessment for you. This is to both reconfirm that topics added to your pie are still mastered and to reassess your overall knowledge of mathematics. Please do your best and take these assessments seriously as they will affect your ongoing work in ALEKS. ALEKS may also take you to a Review Area upon logging in, allowing you to refresh recently learned items. If you do not want to work in this area, you can simply click on My Pie located on the upper right hand corner to return to learning mode to learn new items.

Remember that anytime you leave ALEKS (even by accident), you will be taken back to the same point where you last left off the next time you log on.

Support

If you have questions or registration/system issues with ALEKS, please contact ALEKS customer support at <http://support.aleks.com>.