



Your “On-Track” Guide to:

The Quantitative Reasoning Requirement and the ALEKS Math Placement Exam

ALEKS is an online, adaptive assessment and learning system that is tailored to your ability level. ALEKS includes a one-year personalized learning module to allow you to be well prepared for the class into which you placed, or to help you review and retest into a higher-level class. For more information, go to umb.edu/mathtesting.

Use this guide to understand what your ALEKS math placement score means and which course(s) you should take to meet your degree requirements.

Which Course Should I Take?

If your ALEKS placement results indicate more than one course, be sure you take the course appropriate for your college and major:

- Students in the College of Management (CM) should take a statistics course to satisfy the Quantitative Reasoning requirement and Business Foundation requirement. Choose from MSIS 111L, IT 111L, ECON 205, MATH 125, PSYCH 370, or SOCIOL 350.
- Students pursuing a BA degree in the College of Liberal Arts (CLA) or the College of Education and Human Development can take MATH 114Q or MATH 115 (or higher) to satisfy their quantitative reasoning requirement. Some degrees in CLA may require further coursework in math; make sure to check with

your department. Students pursuing a BS in psychology need to complete Calculus and should take a class on that path (MATH 115→MATH 130→MATH 35 or 140).

- Students in the College of Science and Mathematics (CSM) who are pursuing a BS degree should be on the Calculus Track by starting with a math course that will provide optimal foundational knowledge (MATH 115→MATH 130→MATH 140).
- Students in the Manning College of Nursing and Health Sciences (MCNHS) should take Statistics (nursing students take MATH 125 or another statistics course, such as EHS 280; Exercise and Health Sciences and Urban Public Health students must take EHS 280).
- Students pursuing a BA degree in the School for the Environment (SFE) should take Statistics (ENVSCI 261, MATH 125 or equivalent) after any needed prerequisites for those courses. Students pursuing a BS degree are required to take Calculus and Statistics and should start with the Calculus Track (MATH 115→MATH 130→MATH 135/140). After completing Calculus, students should enroll in Statistics (ENVSCI 261, MATH 125 or equivalent).

**Office for Advising Excellence
Campus Center, 1st Floor, Room 1300.04–06
617.287.7897
assessment.testing@umb.edu
umb.edu/advising**

What are all of those courses?

Course Number and Name	Minimum ALEKS Score	SAT/ACT Score	Prerequisite Course
MATH 114QR* Quantitative Reasoning	35	480/17	N/A
MATH 115* College Algebra	44	520/20	N/A
MATH 125 Introductory Statistics	51	550/23	MATH 114Q or higher
MATH 129 Precalculus for Management MATH 130 Precalculus	59	590/25	B or better in MATH 115 <i>Note: Students can receive credit for one precalculus course only, such as MATH 129 or MATH 130. See the Math Department for further advising, as a reduced-credit course may be an option.</i>
MATH 134 Managerial Calculus MATH 135 Survey of Calculus	66	620/26	MATH 129 or MATH 130 MATH 130 <i>Note: Students can receive credit for one calculus course only such as MATH 134, MATH 135, MATH 140, or MATH 145. See the Math Department for further advising as a reduced-credit course may be an option.</i>
MATH 140 Calculus I MATH 145 Calculus I for Life Sciences	74	640/27	B or better in MATH 130 <i>Note: Students with grades lower than B in the prerequisite course will be dropped from the class. Students can receive credit for one calculus course only, such as MATH 134, MATH 135, MATH 140, or MATH 145. See the Math Department for further advising, as a reduced-credit course may be an option.</i>

*Consult with your advisor for potential registration into Math 114QR or Math 115 if your academic performance in high school meets specific criterion.

If your ALEKS score is 34 or below, please meet with an advisor to discuss your next steps in working toward completing your QR requirement. You will likely benefit from spending more time in the learning module. Email assessment.testing@umb.edu for additional assistance.

More on Quantitative Reasoning

All students are required to complete the quantitative reasoning requirement; **how** you complete it depends on your college and degree program.

Students pursuing a bachelor of arts (BA) degree:

- Students can take MATH 114QR (Quantitative Reasoning) to satisfy their quantitative reasoning requirements. This course is designed to show students the relevance of mathematics to their lives. *Note:* Some majors may require further coursework in math; please check with the department about the requirements for the major.
- Students may waive the quantitative reasoning requirement by passing (or transferring in the equivalents to) one of the following math courses: MATH 125, MATH 129, MATH 130, MATH 134, MATH 135, or MATH 140. Many statistics courses also waive the quantitative reasoning requirement for the BA degree.
- Students may also be waived from the quantitative reasoning requirement by placing into statistics or higher: placement alone demonstrates proficiency and testing **MUST** be done in a proctored setting.

- Students pursuing a BA are encouraged to enroll in and complete an appropriate math course by the time they have earned 30 credits.
- Economics majors who wish to waive the major's precalculus requirement through ALEKS placement are required to earn a score of 66 in a proctored ALEKS exam. They may request a proctored ALEKS exam to meet their precalculus requirement by emailing assessment.testing@umb.edu.

Students pursuing a bachelor of science (BS) degree:

- Students in CLA, CSM, and SFE must complete Calculus (MATH 135, MATH 140, or MATH 145, or the equivalent transfer course) to meet the quantitative reasoning requirement. Students pursuing a BS are strongly encouraged to enroll in appropriate math courses continuously until the math requirement for their major is satisfied.
- Students in CM must complete ECON 205, IT 111L, MATH 125, MSIS 111L, PSYCH 370, or SOCIOL 350 (or the equivalent transfer course).
- Students in MCNHS must complete Statistics (EHS and UPH students are required to take EHS 280, Statistics for Health Professionals).