

# CLA Majors: What is the Quantitative Reasoning requirement?

All CLA students should complete their Quantitative Reasoning (QR) requirement by the time they have earned **30 credits**. Some CLA majors require additional math courses. QR is different from the Math and Technology Distribution requirement.



## **QR for Bachelor of Arts (BA):**

**MATH 114QR or MATH 115**

Notes:

- Economics majors must complete Pre-calculus (MATH 129 or 130) and Statistics (ECON 205 or other approved statistics class) for their major. These each waive the QR requirement for the BA.
- Criminology and Criminal Justice, Sociology, and Social-Psychology majors must complete an approved statistics course for their major. The statistics course will waive the QR requirement for the BA.

## **QR for Psychology Bachelor of Science (BS):**

**MATH 135 or MATH 140**

Notes:

- Students who do not place directly into Calculus may need to prepare by taking all, or part, of the following sequence: MATH 115 → MATH 130 → MATH 135/140.
- BS students should not take MATH 114QR because it does not prepare them for Pre-Calculus or Calculus.
- BS in Psychology students must also complete Psychology Statistics (PSYCH 370).

## **Placement into Math classes:**

- College of Liberal Arts freshman and transfer students who have not previously met their quantitative reasoning requirement must take the ALEKS math placement test, unless they have transferred in the appropriate math pre-requisite to take their QR class. To access ALEKS, log into WISER, click on My Academics → Placement Testing → ALEKS
- The ALEKS placement test includes approximately 30 math questions, takes about 2 hours to complete, is open for 24 hours, and delivers the score immediately upon completion. The score is valid for enrollment in the corresponding math class for 12 months after the test date. The test is free and available 24/7.

## **Learning Modules and Retaking ALEKS:**

- To take ALEKS from WISER:
  - Classic View → Quick Links → ALEKS Math
  - Mobile View → My Academics → Placement Testing → ALEKS Math Place, Prep, Learn
- Students who need or want to retake the ALEKS test for a higher score are allowed two additional attempts during the 6-month period after the first testing.
- After taking the test for the first time, ALEKS will generate learning modules (practice math problems) tailored to the student's learning needs. Students must wait 24 hours and spend at least 3 hours on the learning modules before taking ALEKS a second time. See the testing website (below) regarding additional retakes.

## **Waiver of the QR requirement:**

- BA Students can receive a waiver of the QR requirement with an ALEKS score of 51 or higher in a proctored test. For a proctored testing appointment, call 617-287-5522 or visit [www.umb.edu/testing](http://www.umb.edu/testing) → click on "Math."
- Economics majors may waive their Pre-Calculus requirement if they take a proctored ALEKS test and score 66 or higher.
- BA students can also take a statistics course which will waive the QR requirement, which will count as a Distribution course and may count for some majors when it is one of the statistics options approved by their major.

## Placement Score Chart

Course	Meets the following requirement:	ALEKS score needed	Math Pre-requisites for course
MATH 114QR	Meets QR (BA)	35	ALEKS score 35 or higher
MATH 115 (College Algebra)	Meets QR (BA)	44	Having passed Math 114QR or 125 serves as pre-req for MATH 115 (or ALEKS score 44 or higher)
MATH 125 PSYCH 370 SOCIOL 350 or 352 ENVSCI 261 (Classes in this category = Statistics)	Waives QR + fulfills Math Distribution (BA)	51	MATH 114QR or MATH 115 (or ALEKS score 51 or higher) PSYCH, SOCIOL, ENVSCI have additional pre-requisites (see chart below)
MATH 129 or 130 (Precalculus) ECON 205 (Statistics)	Waives QR + fulfills Math Distribution (BA)	59	MATH 115 w/grade of B or better in the previous semester (or ALEKS score 59 or higher) ECON has additional pre-requisites (see chart below)
MATH 135 (Survey of Calculus)	BA: Waives QR and fulfills Math Distribution BS: Meets QR	66	MATH 130 (or ALEKS score 66 or higher)
MATH 140 (Calculus)	BA: Waives QR and fulfills Math Distribution BS: Meets QR	74	MATH 130 w/grade of B or better in the previous semester (or ALEKS score 74 or higher)

### Additional Math Requirements for CLA Majors

Major	Class required by the major	Math and other pre-requisites
-Economics	ECON 101 and 102	MATH 114QR, MATH 115, or ALEKS score 59 or higher
	ECON 205 (Statistics) Also accepted: MATH 125, PSYCH 370, SOCIOL 350 or 352	ECON 101 or 102 + Math 114QR or MATH 115 or ALEKS score 59 or higher
	Math 129 or 130 (waived with ALEKS score 66, taken in the Testing Center)	MATH 115 with grade of B or better in the previous semester
	ECON 201	ECON 101 + MATH 129 or MATH 130 or ALEKS score 66 or higher
	ECON 202	ECON 101 + 102 + MATH 129 or MATH 130 or ALEKS score 66 or higher
-Criminology and Criminal Justice (CCJ) -Sociology	SOCIOL 350 or 352 (Statistics)	SOCIOL 101 + MATH 114QR or MATH 115 or ALEKS score 51 or higher
	or PSYCH 370 (Statistics)	PSYCH 100 or 101+ MATH 114QR or MATH 115 or ALEKS score 51 or higher
-Psychology BS	PSYCH 370 (Statistics)	Completion of PSYCH 100 or 101 + MATH 114 or MATH 115 or ALEKS score 51 or higher
	MATH 135 (Survey of Calculus) or	MATH 130 or ALEKS score 66 or higher
	MATH 140 (Calculus)	MATH 130 with grade of B or better in previous semester or ALEKS score 74 or higher