

MA 103 Proficiency Exam

The **MA 103 Proficiency Exam** is offered prior to the beginning of the fall & spring semesters for any first-time student enrolled in MA 103. Students are allowed one attempt to complete the exam, and those scoring 80% or above will receive a waiver for the course through verified competency.

It is a 2-hour timed test with approximately 100 multiple-choice questions. Although calculators are not provided, students may use their own **basic 4-function calculator**, which may be purchased at any local dollar store, if they bring it with them to the testing location—**no sharing**. Some examples of calculators that are not permitted would be scientific/graphing calculators, calculators on phones, watches, or any other electronic device, models that make noise or require electricity, etc. Questions concerning calculator usage should be discussed with the instructor prior to reporting to the test location.

A list of exam topics include:

- Whole numbers: notation; place value; addition, subtraction, multiplication & division; rounding & estimating; simplifying expressions using order of operations
- Fractions: addition, subtraction, multiplication & division; factors & prime factorization; ordering, simplifying & finding equivalent fractions; least common multiples; converting mixed numbers to fractions/fractions to mixed numbers
- Decimals: addition, subtraction, multiplication & division; converting decimals to fractions/fractions to decimals; rounding & estimating
- Ratios & proportions: rates; unit pricing; solving proportions
- Percentages: converting decimal to percent, fraction to percent, percent to decimal or fraction; percent problems involving sales tax, commission, discounts
- Data, Graphs & Statistics: average, median & mode; tables, circle graphs, line graphs, bar graphs
- Measurement: American unit conversion; metric unit conversion; time & temperature conversion
- Geometry: perimeter & area of plane figures
- Real numbers: addition, subtraction, multiplication & addition
- Algebra: translate & solve single variable equations