MATH PROFICIENCY EXAMS

(COLLEGE ALGEBRA, TRIGONOMETRY, PRECALCULUS, CALCULUS)

Students who have a TSI score high enough to be exempt from any developmental math classes are eligible to begin with College Algebra.

Precalculus Prerequisites: Students who have a TSI score high enough to be exempt from any developmental math classes and have either a Math ACT of 22, a Math SAT taken before February 2016 of 510, or a Math SAT taken after February 2016 of 540 are eligible to begin with Pre-calculus. A student without those exam scores may take an online departmental placement exam. For further information on the Precalculus placement exam, contact Dr. Farris at mark.farris@msutexas.edu. The Math Department strongly recommends that a student who begins with Precalculus has had a fourth year of high school mathematics that includes a semester of trigonometry.

Math proficiency exams are for students who wish to take higher level math classes. Students are not allowed to take a proficiency exam for any course in which he/she has had college level instruction.

Thursday, July 2nd, 2020	10:00am	Bolin Hall - Rm 101
Thursday, August 20th, 2020	10:00am	Bolin Hall - Rm 101
Tuesday, August 25th, 2020	2:00pm	Bolin Hall - Rm 118
Thursday, January 7th, 2021	10:00am	Bolin Hall - Rm 101
Tuesday, January 12th, 2021	2:00pm	Bolin Hall - Rm 118
Thursday, May 27th, 2021	10:00am	Bolin Hall - Rm 101

Students need to first **pay at the Business office** then **bring the receipt and picture ID** to the exam.
Cost of exam $35

Note: Other option includes taking **CLEP exams** to receive college credit for College Algebra, Precalculus, or Calculus I.

These exams are more expensive than the math proficiency exams, but there are review materials that can be purchased for as little as $10 to help prepare for the exams. These review materials would most likely help the student prepare for math proficiency exams as well.
Information about different CLEP exams and corresponding study materials can be found at http://www.collegeboard.com/student/testing/clep/exams.html and from pages accessed via links from this page.

MATH PROFICIENCY EXAM TOPICS

If a student feels that his/her algebra background is good, but has not had much trigonometry, the student should take the College Algebra Proficiency exam and upon passing that exam, take Trigonometry.

Any student wishing to begin in Calculus I must either pass the College Algebra and Trigonometry proficiency exams, or pass the Precalculus proficiency exam.

College Algebra Proficiency Exam Topics
Graphing Calculator required

1. Slope, Equation of a line
2. Solve Equations
3. Graphing
4. Simplifying Algebraic Expressions
5. Polynomial Division
6. Domain
7. Inequalities
8. Applications
9. Logarithms
10. Exponential Functions
11. Piecewise – Defined Functions
12. Systems of Equations
13. Composition of Functions
14. Variation
15. Increasing, Decreasing Functions

Trigonometry Proficiency Exam Topics
Graphining Calculator Required

1. Radian and Degree Measure
2. Compute Values for Sin θ, Cos θ, Tan θ
3. Special Angles (30°, 45°, 60°)
4. Right Triangles
5. Trig. Identities
6. Trig. Equations
7. Graphs
8. Inverse Trig. Functions
9. Simplifying Expressions
10. Law of Cosines
11. Law of Sines
12. Dot Product of Vectors
13. Vector Projections
14. Complex Numbers

Pre-Calculus Proficiency Exam Topics
Graphing Calculator Required

1. Logarithms
2. Simplify Algebraic Expressions
3. Evaluate Functions
4. Piecewise-Defined Functions
5. Absolute Value
6. Graphing
7. Solve Equations
8. Inequalities
9. Composition of Functions
10. Radian and Degree Measure
11. Find Values for Sin θ, Cos θ, Tan θ
12. Right Triangle Trig.
13. Special Angles
14. Trig. Identities
15. Trig. Equations
16. Inverse Trig. Functions
17. Simplify Trig. Expressions
18. Law of Sines
19. Law of Cosines

Calculus Proficiency Exam Topics
No Calculators Allowed

1. Distance Formula
2. Derivatives
3. Basic Integration
4. Tangents to a curve
5. Eq. of a Line
6. Area
7. Limits
8. First & Second Derivative Tests
9. Chain Rule
10. Polar Coordinates
11. Applications
12. Differentials
13. Continuity
14. Max/Min
15. Asymptotes
16. Graphs