

MATHEMATICS PLACEMENT TEST FOR INCOMING FRESHMEN

Saturday, April 15th, 2023

The EHS Mathematics & Computational Sciences Department is committed to providing all students the best possible math education. To help us ensure students are placed in the proper math course to foster student success, all incoming freshmen students will take a math placement test to verify their proper math placement for the upcoming school year.

Each student will take one of the three outlined math tests to demonstrate proficiency. These results coupled with each student's transcript credit information will be used to place students in the proper math course. Results of these placement tests will also be used to place students in Honors level math courses, where available.

Students currently enrolled in Prealgebra, Math 8, or a similar course will be placed in Algebra I but are still required to take the Algebra I Proficiency Test to assess readiness for Algebra I. This process helps us understand our incoming students and develop curriculum to ensure student success.

Algebra I Proficiency Test

For students currently enrolled in Algebra I, to be placed into Geometry

No calculator or reference materials will be permitted on this test.

- Evaluating numerical expressions (order of operations, integer arithmetic, exponents)
- Simplifying and evaluating algebraic expressions
- Representing functions algebraically, graphically, and using tables
- Solving and graphing linear equations/inequalities
- Solving systems of two linear equations/inequalities
- Factoring and solving quadratic equations
- Modelling real-world applications using linear, quadratic, and exponential functions

Geometry & Algebra I Proficiency Test

For students currently enrolled in Geometry, to be placed into Algebra II

No calculator or reference materials will be permitted on this test.

To show they are ready for Algebra II, students must demonstrate proficiency in both Geometry and Algebra I. In addition to the topics listed under the Algebra I Proficiency Test (above), this test will also cover:

- Basic geometric shapes and properties (points, lines, planes, line segments, angles, etc)
- Parallel and perpendicular lines and their properties
- Congruence and similarity
- Properties of triangles
- Right triangle trigonometry
- Properties of quadrilaterals
- Properties of circles
- Area and volume

Algebra II Proficiency Test

For students currently enrolled in Algebra II, to be placed into Precalculus

No reference materials will be permitted on this test. <u>The test consists of a non-calculator and a calculator part</u>. Calculators permitted are TI-84 or TI-89 graphing calculators.

- Solving and graphing equations/inequalities including linear, quadratic, polynomial, radical, rational, higher-ordered polynomial, exponential, and logarithmic functions
- Solving systems of equations/inequalities
- Performing operations with complex numbers
- Performing matrix operations
- Performing operations on functions
- Modelling real-world applications using equations of best fit
- Graphing and writing equations of conic sections

Please direct any questions to the Math & CS Department Chair, Mr. Richard J. May. rmay@ehshouston.org