

Math Placement for Transfer Students

Transfer students who enroll at Catalina Foothills High School (CFHS) from another school or district will be placed in the next standard level math course based on their course history from their prior school, unless the student chooses to take a proficiency exam to enter the honors pathway. The honors proficiency exam is offered near the end of each school year and before the beginning of a new school year. The exam assesses knowledge of the material necessary to be successful in the next course level. CFHS honors classes teach material at an accelerated pace and content taught is often not covered in other schools/districts. Large gaps in knowledge will likely prevent achievement in future classes, so care is given to properly placing students to ensure a successful learning experience.

Each student who takes an honors pathway proficiency exam will receive a rubric score in each area of content that is assessed. Rubric scores are based on a four-point continuum. If the average of the rubric scores is above a 2.5, the student will be placed in the honors course, assuming they have credit for all prior courses on their transcript(s). The proficiency exam offered to a student will be based on the courses that have already been completed. Students have up to 2 hours to complete the exam.

The main topics covered on the honors proficiency exams are listed below.

Algebra 1 (Content Required for Honors Geometry)

- Analysis of Linear Functions (Writing equation of lines, graphing lines, analyzing key features of linear functions in and out of context)
- Average Rates of Change (in and out of context)
- Function Notation (in and out of context)
- Analysis of Exponential Functions (including analyzing asymptotes and exponent rules)
- Analysis of Quadratic Functions (including completing the square)
- Solving Linear Equations, Quadratic Equations, and Systems of Equations
- Graphing Functions (using both key features and transformations including all translations and vertical transformations)

Honors Geometry (Content Required for Honors Algebra 2)

- <u>ALL</u> of the Algebra 1 content above <u>AND</u>
- Analysis of Radian Angle Measures
- Analysis of the Unit Circle
- Trigonometry (analysis of sine, cosine, and tangent functions in and out of context)
- Transformations of any function including all vertical and horizontal transformations.

Honors Algebra 2 (Content Required AP Precalculus)

- <u>ALL</u> of the Algebra 1 and Geometry content above <u>AND</u>
- Analysis of Inverse Functions
- Analysis of Exponential and Logarithmic Functions (including solving equations, graphing functions, writing equations, and logarithmic and exponent properties)
- Analysis of all key features of a function (including zeros, y-intercept, end behavior, removable and non-removable discontinuities, increasing, decreasing and constant intervals, and domain and range)
- Analysis of Rational Functions
- Analysis of Trigonometric Functions (including graphing)