Content Standards

A.SSE.1.a - Interpret parts of an expression, such as terms, factors, and coefficients.

A.APR.b.3 - Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial.

F.IF.7 - Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.

F.IF.4 - For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship.

F.IF.8 - Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.

A.CED.2 - Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.

N.CN.1 - Perform arithmetic operations with complex numbers.

N.CN.7 - Solve quadratic equations with real coefficients that have complex solutions.

N.CN.8 - Extend polynomial identities to the complex numbers. For example, rewrite \( x^2 + 4 \) as \( (x + 2i)(x - 2i) \).

A.APR.6 - Rewrite simple rational expressions in different forms; write \( \frac{a(x)}{b(x)} \) in the form \( q(x) + \frac{r(x)}{b(x)} \), where \( a(x) \), \( b(x) \), \( q(x) \), and \( r(x) \) are polynomials with the degree of \( r(x) \) less than the degree of \( b(x) \), using inspection, long division, or, for the more complicated examples, a computer algebra system.

Process Standards

Students will effectively contribute to the group.

Students will be able to effectively critique work.