

## Assessment Objectives for Chapter 2 Quiz 2

The following is a list of objectives that will be covered on the assessment. Topics of study include: Quadratic Functions, Polynomial Functions and Polynomial Division.

### Objectives

*On the chapter2 quiz 2, the student will be able to...*

- Divide polynomial functions and express the solution using the division algorithm.
- Find the x and y intercepts of a quadratic function.
- Use synthetic substitution to find the value of a function.
- Use Descartes' Rule of Signs to determine the number of possible positive or negative zeros a polynomial function has.
- Use the Rational Zero Test to find all possible rational zeros of a polynomial function.
- Find all zeros of a polynomial function.
- Perform basic algebraic operations with imaginary and complex numbers. (addition, subtraction, multiplication and division)
- Write a polynomial as a product of factors irreducible over the reals.
- Write a polynomial as a product of factors irreducible over the rationals.
- Write a polynomial in completely factored form, or as a product of linear factors.
- Raise an imaginary number to a power.
- Find a polynomial function that has the given zeros.