

Assessment Objectives Chapter 2 Exam

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 midchapter quiz, the student will be able to...

- Put a quadratic function in vertex form.
- Find the vertex of a quadratic function that is in vertex form or general form.
- Determine the maximum or minimum value of a quadratic function.
- Determine the left and right hand behaviors of a polynomial function using the leading coefficient test.
- Find the equation of a polynomial function given the zeros of the function.
- Determine the effect multiplicity of zeros has on the graph of a polynomial function.
- Find all zeros of a polynomial function by factoring.
- Perform polynomial long division.
- Perform synthetic division.
- Use synthetic substitution to find the value of a function.
- Use the remainder theorem to find a root of a polynomial.
- Use synthetic substitution to find the value of a function.
- Use the Rational Zero Test to find all possible rational zeros of a polynomial function.
- Find all zeros of a polynomial function.
- Graph a polynomial function.
- Perform basic algebraic operations with imaginary and complex numbers. (addition, subtraction, multiplication and division)
- Find a polynomial function that has the given zeros.
- Find all asymptotes of a rational function.
- Find the range and domain of a rational function.
- Graph a rational function.
- Modeling – box problem