Assessment Objectives Chapter 2 Quiz 1

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 quiz, the student will be able to…

- Solve quadratic equations by completing the square.
- Solve quadratic equations by using the quadratic formula.
- Determine the nature of the roots of a quadratic using the discriminant.
- Put a quadratic function in vertex form.
- Determine how the values of a, h, and k affect the graph of a function in
- Find the vertex of a quadratic function that is in vertex form or general form.
- Find the x and y intercepts of a quadratic function.
- Find the range and domain of a quadratic function without graphing it.
- Graph a quadratic function.
- Determine the maximum or minimum value of a quadratic function.
- Find the equation of a parabola given the vertex and a point on the parabola.
- Find the equation of a parabola given the x intercepts of the graph of the function.
- Find the equation of a parabola given the x intercepts and the maximum or minimum value of the 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.