In this lesson I learn:

- How to determine the number of _____ using the ________ Theorem of ________
- Whether a binomial is a ________ using the ________ Theorem
- How to find the ____________ using the Remainder Theorem

**The Fundamental Theorem of Algebra**

We call solutions the zeroes of a function because:

This theorem generally states that:

- I read Example 1 and 2 at the bottom of page 1.
- I understand what the degree of a polynomial is and how this relates to the number of zeroes.

**The Factor Theorem**

A factor is a number, variable, or polynomial that will ______ into another number, variable, or polynomial without a ____________.

This theorem states that a first degree binomial (something like x-1) is a ________ of a function IF AND ONLY IF the remainder is ________.

- I read Example 1 at the bottom of page 2.
- I understand how the remainder relates to whether or not something is a factor. (Remainder 0 -> this is a factor)

**The Remainder Theorem**

This theorem tells us that the remainder from division by a factor (such as (x+1)) is the same as the value of the function at that zero (so if the factor was at x+1, you’d use x=-1 in your function notation).

- I examined both boxes in Example 1 at the bottom of page 3.
- I understand that both substitution and synthetic division can be used to find the remainder.