**Factoring Polynomials by Grouping, Category 2 (A.4A), PH 9.8**

The previous lesson involved factoring a trinomial. This lesson will show how to factor a four-term polynomial.

To factor polynomials with 4 terms, we will use the **Factor by Grouping** Method. This process involves:

* Grouping the polynomial into 2 binomials
* Factoring the GCF from each binomial
* Writing the expression in factor form

Let’s recall factoring the GCF (greatest common factor) from a polynomial.

Factor the GCF from

, the GCF

**Example 2**

Factor

( Group terms as binomials, based on common factors

Factor out the GCF from each binomial

Both terms have a common multiplier, . The common multiplier is being multiplied by and by . Show this multiplication the distributive property notation.

Factored form

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Factor out the GCF from each binomial

Both terms have a common multiplier, . The common multiplier is being multiplied by and by . Show this multiplication using distributive property notation.

Factored form

**Try It**

Factor by Grouping

**Practice: Factoring Polynomials by Grouping, Category 2 (A.4A), PH 9.8**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_\_\_\_**

**Factor Completely Using the Grouping Method**



**Express your understanding in words.**

1. Describe the process for factoring four-term polynomial using the grouping method.