Math 3 Guided Notes Unit 3 Day 2 – Factoring Polynomials with Higher Powers

Example 1: When you need to pull out the GCF: $3x^3 - 14x^2 - 5x$

Example 2: When you need to use the REVERSE BOX METHOD: $x^3 + 2x^2 + 4x + 8$

****This method is used when you have EXACTLY ____ terms.

Example 3: When you need to treat the x^4 like an x^2: $x^4 - 2x^2 - 8$

<u>Example 4:</u> When factoring equations to the 5th power, you may need to use multiple methods.

a) $x^5 - 5x^3 + 6x$

b) $x^5 - 9x^3$

Now You Try: Decide the best method to use to factor the following.

1) $3b^3 - 5b^2 + 2b$

3) $x^4 - 3x^2 - 4$

2) $x^4 - 3x^3 - 2x + 6$

4) $2x^5 - 9x^4 - 5x^3$