## SECTION 4.4: FACTORING POLYNOMIALS - PART I

Homework: \_\_\_\_\_

## **Learning Targets:**

4c. Factor polynomial functions by graphing, grouping, and quadratic techniques.

When factoring polynomials, you have to factor \_\_\_\_\_\_\_. Sometimes you will have to factor \_\_\_\_\_\_\_ times to find all the factors. When you are working with \_\_\_\_\_\_ terms, it is good use the \_\_\_\_\_\_ method, where you make 2 sets of \_\_\_\_\_\_

$$x^3 - 49x$$

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

Factoring by Special Factors (Squares)

$$x^4 - 8x^2 + 16$$

$$625x^8 - 256$$

Factoring by Grouping

$$x^3 + 5x^2 - 4x - 20$$

$$2x^3 + 5x^2 - 8x - 20$$