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

$$
x^{3}-49 x
$$

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

Factoring by Special Factors (Squares)

$$
x^{4}-8 x^{2}+16 \quad 625 x^{8}-256
$$

Factoring by Grouping

$$
x^{3}+5 x^{2}-4 x-20 \quad 2 x^{3}+5 x^{2}-8 x-20
$$

