

## Factoring Polynomials Day #1 Notes

Date: \_\_\_\_\_

2 terms (GCF, Difference of 2 Squares, Sum/Difference of 2 Cubes)

### GCF

Solve.

$$x^3 - 3x^2 = 0$$

$$7x^2 - 14x = 0$$

### Difference of 2 Squares

Recall:  $x^2 - 36 = 0$

Solve.

$$x^4 - 16 = 0$$

$$x^4 - 81 = 0$$

$$x^4 - 625 = 0$$

$$x^4 - 49 = 0$$

## Sum & Difference of 2 Cubes

Formulas:  $a^3 + b^3 =$

$$a^3 - b^3 =$$

Factor.

$$x^3 + 27$$

$$x^3 - 8$$

Solve.

$$x^3 + 125 = 0$$

$$x^3 - 64 = 0$$