FACTORING FLOW CHART

FIND **GREATEST COMMON FACTOR (GCF)** (if necessary)

- number, variable or combination of the two that divides evenly into each term

EXAMPLE

$2x^2 + 10x + 12$ GCF = 2

$= 2(x^2 + 5x + 6)$

TWO TERMS

THREE TERMS

DIFFERENCE OF SQUARES

$x^2 - c^2$

$(x + c)(x - c)$

EXAMPLE

$x^2 - 25$

$= (x + 5)(x - 5)$

USE "PRODUCT and SUM"

$x^2 + bx + c$

"c" is the **product**

"b" is the **sum**

*** Need to find two numbers that <u>multiply</u> to give you the **product**; *same* two numbers when <u>added</u> give you the **sum**

EXAMPLE

$x^2 + 5x + 6$ P = +6 S = +5

$= (x + 3)(x + 2)$