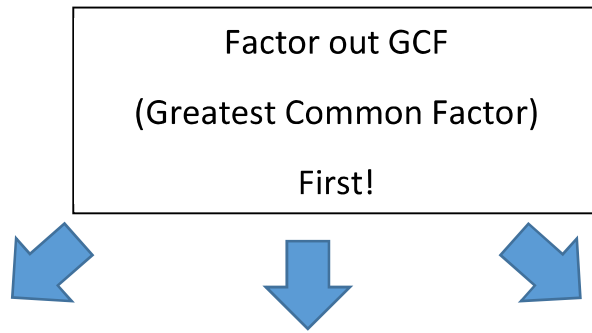


FACTORING FLOWCHART



2 Terms	3 Terms	4 Terms
<u>Difference of 2 Squares</u> $a^2 - b^2 = (a-b)(a+b)$	$X^2 + BX + C$ $(x + \underline{\quad})(x + \underline{\quad})$ Find 2 numbers which add to B and multiply to C .	<u>Factoring By Grouping</u> If necessary, rewrite the expression so that the first 2 terms share a common factor and the last 2 terms share a common factor. Example: $8x^3 - 12x + 2x^2 - 3$ $8x^3 + 2x^2 - 12x - 3$ $2x^2(4x + 1) - 3(4x + 1)$ $(2x^2 - 3)(4x + 1)$
<u>Sum of 2 Cubes</u> $a^3 + b^3 = (a+b)(a^2 - ab + b^2)$	$AX^2 + BX + C$ $(\underline{\quad}x + \underline{\quad})(\underline{\quad}x + \underline{\quad})$ When leading coefficient is <u>not</u> 1, use GUESS & CHECK. Find 2 numbers which multiply to A and 2 numbers which multiply to C and then use FOIL to check. First Outer Inner Last	
<u>Difference of 2 Cubes</u> $a^3 - b^3 = (a-b)(a^2 + ab + b^2)$		