Factoring Flow Chart

Start

Is there a GCF?

Yes → Factor out The GCF

No →

How many terms do you have?

Two

Factor by grouping, Usually 2 by 2, Sometimes 3 by 1

Three

What is the Value of a in $ax^2 + bx + c$?

$a \neq 1$ →

Find factors of $ac$ that add To the value of $b$. Use the Answer to split the Trinomial into four terms.

$a = 1$ →

Find the Factors of $c$ That add to $b$ These go in the Parenthesis $(x \quad)(x \quad)$

Four

Go to *

Three

Sum of Cubes

$A^3 + B^3$

$(A + B)(A^2 - AB + B^2)$

Before you finish does any Group factor more?

Two

Which special type is it?

Difference of Cubes

$A^3 - B^3$

$(A - B)(A + B)$

Before you finish does any Group factor more?

Can’t Factor Go To *

Sum of Squares

$A^2 + B^2$

Before you finish does any Group factor more?