How do you factor polynomials?

Step 1:
Find and remove the GCF
(Greatest Common Factor)

How many terms does the polynomial have?

trinomial

binomial

4 terms

Product & Sum
Method of Factoring
- Make the X.
- Tic-tac-toe.

Do the terms contain only perfect squares or perfect cubes?

Use the grouping method of factoring.

Squares

Cubes

$a^2 - b^2 = (a + b)(a - b)$

$a^3 - b^3 = (a - b)(a^2 + ab + b^2)$
$a^3 + b^3 = (a + b)(a^2 - ab + b^2)$

(MCC9-12.A.APR.3)