

Factoring

Factor out the greatest common factor.

How many terms does the expression have?

2

Is the expression a difference of perfect squares?

Yes

Use $a^2 - b^2 = (a - b)(a + b)$ to factor

No

Stop. The expression cannot be factored using methods in this class.

3

Is the leading coefficient 1?

Yes
 $x^2 + bx + c$

Find factors of c that add up to b and factor as $(x+m)(x+n)$. If no such factors exist, the trinomial cannot be factored further.

No
 $ax^2 + bx + c$

Factor by the "ac" method, if possible.

4

Factor by grouping, if possible.