

NAME _____

DATE _____

Module 12 Simplifying Algebraic Expressions
by Factoring Polynomials

Lesson 4 Factoring $x^2 + bx + c$



**guided
notes**

Lesson Objective

- Factor trinomials of the form $x^2 + bx + c$.

To factor a trinomial, think of FOIL in _____.

For the trinomial, the constants in the binomial factors of the trinomial

$x^2 + 10x + 24$ must have a product of _____ and

a sum of _____.

The factors of $x^2 + bx + c$ are $(x + r)(x + s)$ where _____ = c

and _____ = b .

Factor.

1 $y^2 + 10y + 9 =$

2 $t^2 + 2t + 1 =$

3 $r^2 - 9r + 20 =$

4 $k^2 + 8k - 20 =$

