

NAME _____

Module 12 Simplifying Algebraic Expressions
by Factoring Polynomials
Lesson 2 Factoring by Grouping

guided
notes

Lesson Objectives

- Factor out a common binomial factor.
- Factor by *grouping*.

When factoring a polynomial, look for the **GCF** _____ first.

The Distributive Property states that $a(b + c) = ab + ac$ _____.

1 Factor: $x(y + 4) - 3(y + 4)$

$(y + 4)(x - 3)$ _____

Steps for factoring by grouping:

- Form groups so that **each group** _____ has a common factor.
- Factor the **GCF** _____ out of each group.
- Factor out the **binomial GCF** _____ from the resulting terms.

2 Factor: $ar + as + br + bs$

$(r + s)(a + b)$ _____

3 Factor: $10 - xy - 2y + 5x$

$(5 - y)(x + 2)$ _____

