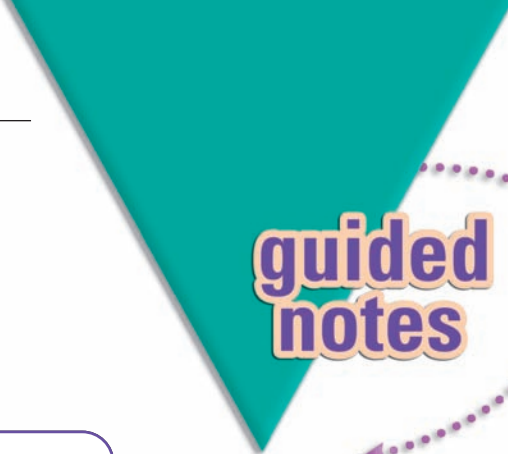



NAME _____

Module 12 Simplifying Algebraic Expressions
by Factoring Polynomials

Lesson 6 Factoring Using Several Methods



**guided
notes**



Lesson Objective

- Factor polynomials which require more than one method of factoring.

When factoring polynomials, always look for a

greatest common factor _____ first.

A polynomial is factored **completely** _____ when each factor is either a monomial or a prime polynomial. In a **prime** _____ polynomial, the only factors are **itself and one** _____.

1 Factor: $8b^5 - 2b^3 =$

$2b^3(2b + 1)(2b - 1)$ _____

2 Factor: $4rs^2 - 16rs - 48r =$

$4r(s + 2)(s - 6)$ _____

3 Factor: $2p^5 + 7p^4 + 3p^3 =$

$p^3(2p + 1)(p + 3)$ _____

4 Factor: $t^3 + 3t^2 - t - 3 =$

$(t + 1)(t - 1)(t + 3)$ _____

5 Factor: $a^4 - b^4 =$

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

