NAME _____ DATE _____

guided notes

Module 12 Simplifying Algebraic Expressions by Factoring Polynomials

Lesson 3 Factoring The Difference of Two Squares

Lesson Objectives

- Factor the difference of two squares.
- Recognize first 15 perfect squares
- Recognize the sum of two squares is not factorable.

The rule for factoring the difference of two squares, $a^2 - b^2$ is for any expressions a and b, _____.

Square the following numbers:

$1^2 =$ _____	$6^2 =$ _____	$11^2 =$ _____
$2^2 =$ _____	$7^2 =$ _____	$12^2 =$ _____
$3^2 =$ _____	$8^2 =$ _____	$13^2 =$ _____
$4^2 =$ _____	$9^2 =$ _____	$14^2 =$ _____
$5^2 =$ _____	$10^2 =$ _____	$15^2 =$ _____

For any expressions a and b, $a^2 + b^2$

_____.

1. Factor, if possible: $b^2 - 100 =$

   _____

2. Factor, if possible: $1 - z^2 =$

   _____

3. Factor, if possible: $100h^2 - 49 =$

   _____