Name: _____

Chapter 8 Review Notes

Prime Factorization

You find the prime factorization of a number by using a _____.
All numbers being multiplied together in your prime factorization must be _____.
      Prime numbers can only be divided by _____ and _____.
Complete numbers 5 and 9 on page 594.

5.   9.

Finding the Greatest Common Factor (GCF) of Numbers

List all the factors of the pair of numbers. The GCF is the _____ number
they have in common.
Complete numbers 11 and 14 on page 594.

11.   14.

Finding the Greatest Common Factor (GCF) of Monomials.

Find the GCF of the numbers and the GCF of each different variable. Write each of the
GCF's as a product.
      If you have two terms with the same variable raised to a power, the GCF is the
      one with the _____ exponent.
Complete numbers 17 and 18 on page 594.

17.   18.

Factoring Using the GCF

Find the GCF of each term. Put the GCF in front of the parenthesis and figure out what
was left from the original terms after you factored out the GCF.
Complete numbers 21 and 25 on page 595.

21.   25.

Factoring x²+bx+c

When your first term is <u>just x^2</u> you need to find two numbers that _____

to the last number and _____ to the middle number.

Complete numbers 51, 54, 58, and 68 on page 596.

51.   54.

58.   68.

Difference of Squares *Factor the following.*

1. $x^2 - 81$ 2. $a^2 - 121$

Factoring ax²+bx+c

The method you use to factor trinomials in the form $ax^2 + bx + c$ is the _____ method.

Can I factor a GCF out of the trinomial? Is the first term a negative number?

Complete numbers 71, 80, 88, and 89 on page 596. Also complete the two problems below.

71.   80.

88.   89.

1. $6x^2 + 26x + 24$ 2. $10x^2 - 5x - 105$