Prime Time Lesson **3.3 Prime Factorization to find LCM & GCF**

Use the prime factorizations of 72 and 120 to find their GCF_____ & LCM_____.

The GCF of 25 and 12 is 1.   **Numbers with 1 as the GCF are called RELATIVELY PRIME.**

- Find another pair of numbers whose GCF is 1. _____

- How can you determine whether the GCF of two numbers is 1 by looking at their prime factorizations?

Find two pairs of numbers whose LCM is the product of the numbers.

Find two pairs of numbers whose LCM is less than the product of the numbers.

How can you determine whether the LCM of two numbers is the product of the numbers or is less than the product of the numbers?

The prime factorization of a number is $2 \times 5 \times 3^2$.
- Find two numbers whose LCM is this number. _____ & _____

- Find two numbers whose GCF is this number. _____ & _____