

Date: January 21, 2022

Subject: Mathematics

Topic: Prime Factorization (Ladder Method) Homework

Objectives

Students will be able to:

- Solve the answers to example questions on finding the prime factorization of a number

Reminder Ladder Method Steps:

1. List the first ten prime numbers
2. Look at the smallest prime number that can be divided into the number given and place that number on the left side of the ladder
3. Divide the prime number into the given number (show your working on the side). Place your answer on the right hand side underneath the given number.
4. Repeat steps 2 and 3 until your answer is "1" on the right hand side
5. The numbers on the left are a part of your answer. Place your answer by putting the answers from smallest to largest with a multiplication sign in between each number.
6. Place your answer in **index form** (putting back the base number and putting the amount of the base number seen as the power).

Homework

Instructions: Express each of the following numbers as a product of its prime factors.

1. $27 =$

2. $88 =$

3. $54 =$

4. $180 =$

5. $75 =$