Date: January 17, 2022

Subject: Mathematics

Topic: Prime Factorization (Ladder Method) Classwork

Objectives

Students will be able to:

- Calculate the answers to 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).*

Classwork:

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

1. 25

2. 45

3. 50

4. 200

5. 175