

Prime Factorization

Prime factorization is a process in which the unique set of prime numbers that multiply to produce the number of interest is found. Prime factorization does not require all of the factors of a number to be determined.

Factors of 18: 1, 2, 3, 6, 9, 18

Prime Factorization of 18: $2 \cdot 3 \cdot 3$

Factor Tree

A prime factorization method that involves factoring composite numbers until only prime numbers remain.

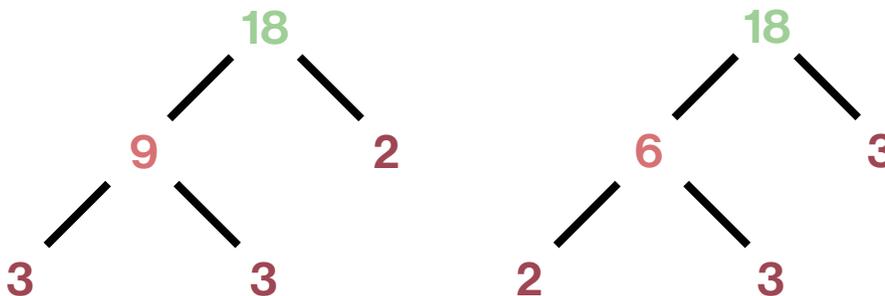
1. Determine any factorization of the starting number.

Prime Factorization 18



2. Continue factoring until all factors are prime numbers.

Prime Factorization 18



Prime Factorization 18

$$2 \cdot 3 \cdot 3 = 18$$