Finding the Prime Factorization of a Number

A prime number is a number that can only be divided by itself and 1. Examples of prime numbers are:

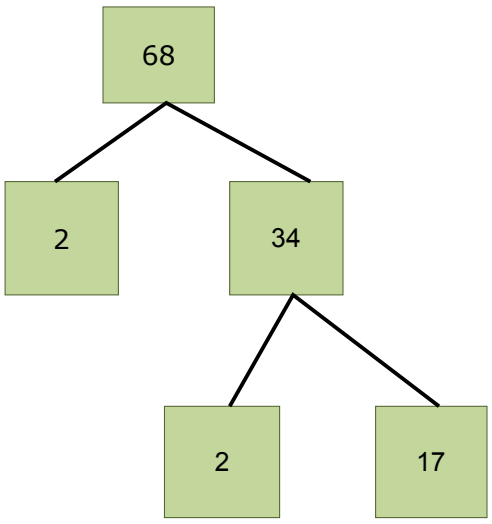
2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, etc.

To find the Prime Factorization of a number, we need to find the prime numbers that when multiplied together, give us the number we started with.

Example:

12 = 2 x 2 x 3

Using a tree diagram or Successive Division gets us the same results.



Successive Division

2	68
2	34
17	17
	1

Remember to always use prime numbers to complete successive division.

Finding the prime factorization of a number using Successive Division is easy and your answers are easily found unlike when using the tree diagram. Try the two methods above to find the prime factorization of 136. Do you get the same answers? (2 x 2 x 2 x 17)