

Prime factorization is finding which prime numbers can be used to multiply to get the original amount. Prime numbers can only be divided by 1 and itself, and must be whole numbers greater than one. Factors are the numbers multiplied together to get the product. An example of prime factorization is shown below using 12.

$12 = 2 \times 6$ (2 is prime, so it stays, but 6 is not)

$12 = 2 \times 2 \times 3$ because $2 \times 3 = 6$ and the numbers 2 and 3 are both prime.