The sum of all the factors of 100 is?

Answer

In mathematics factor, a number or algebraic expression that divides another number or expression evenly—i.e., with no remainder. Any number can be divided by one and itself. Numbers that can only be divided by one and themselves are called prime numbers. The number one and the number itself are factors of the number. A positive integer greater than 1, or an algebraic expression, that has only two factors (i.e., itself and 1) is termed prime; a positive integer or an algebraic expression that has more than two factors is termed composite. The prime factors of a number or an algebraic expression are those factors which are prime. By the fundamental theorem of arithmetic, except for the order in which the prime factors are written, every whole number larger than 1 can be uniquely expressed as the product of its prime factors.

In our case we have number- 100, so $1, 2, 4, 5, 10, 20, 25, 50, 100$ are all factors of 100.

The sum of all factors is $\sum 1 + 2 + 4 + 5 + 10 + 20 + 25 + 50 + 100 = 217$

If we need to find the "prime factorization" of a number, so we have to find the list of all the prime-number factors of a given number. The prime factorization does not include 1, but does include every copy of every prime factor. The prime factorization of 100 is $2 \times 2 \times 5 \times 5 = 100$.