Problem of the Week

Problem C

Just Sum Primes

A *prime number* is an integer greater than 1 that has only two positive divisors: 1 and itself. The number 17 is prime because its only positive divisors are 1 and 17.

The variables a, b, c, and d represent four different prime numbers. If $a \times b \times c \times d$ is equal to a three-digit number with a tens digit of 1 and a ones (units) digit of 0, determine all the possible values of $a + b + c + d$.