



# Problem of the Week

## Problem C

### Sum Positive Primes

A *prime* number is a positive integer greater than 1 that has exactly two positive integer factors, 1 and the number itself. A *composite* number is a positive integer greater than 1 that has more than two positive integer factors. The number 1 is neither prime nor composite.

Four distinct prime numbers have a product of  $d10$ : a three-digit number with hundreds digit  $d$ . Determine all possible values of the sum of these four prime numbers.

**d10**

