
Greatest common divisor of four

P57852_en

Write a function that computes the greatest common divisor of four natural numbers a, b, c and d using the *fast* version of the Euclidean algorithm.

Interface

C++,C	<code>int gcd4(int a, int b, int c, int d);</code>
Java	<code>public static int gcd4(int a, int b, int c, int d);</code>
Python	<code>gcd4(a, b, c, d) # returns int</code> <code>gcd4(a: int, b: int, c: int, d: int) → int</code>

Precondition

The four numbers are strictly greater than zero.

Observation

You only need to submit the required procedure; your main program will be ignored.

Hint

Using the function $gcd(a, b)$ of the exercise should be useful.

Problem information

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