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	**int** $gcd4$(**int** a, **int** b, **int** c, **int** d);
Java	**public static int** $gcd4$(**int** a, **int** b, **int** c, **int** d);
Python	$gcd4(a, b, c, d)$ # returns int
	$gcd4(a: int, b: int, c: int, d: int) \rightarrow int$

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 P88790: "Iterative greatest common divisor" should be useful.

Problem information

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