= 1 and m ? 2 =
n ? 1 = 0 are the initial values of the recursion . The convergent mk / nk is the best rational number approximation to a / b with denominator nk :
<formula>

= = = Polynomials = = =

Polynomials in a single variable x can be added , multiplied and factored into irreducible polynomials , which are the analogs of the prime numbers for integers . The greatest common divisor polynomial g (x) of two polynomials a (x) and b (x) is defined as the product of their shared irreducible polynomials , which can be identified using the Euclidean algorithm . The basic procedure is similar to integers . At each step k , a quotient polynomial qk (x) and a remainder polynomial rk (x) are identified to satisfy the recursive equation