

DEJAVU SANS MATH 2017?

Various notations for continued fractions

The integers a_0, a_1 etc., are called *coefficients* or *terms* of the continued fraction. One can abbreviate the continued fraction

$$a_0 + \frac{1}{a_1 + \frac{1}{a_2 + \frac{1}{a_3}}}$$

in the notation of Carl Friedrich Gauss as

$$x = a_0 + \mathbf{K}_{i=1}^3 \frac{1}{a_i}$$

or in the notation of Alfred Pringsheim as

$$x = a_0 + \frac{1|}{|a_1} + \frac{1|}{|a_2} + \frac{1|}{|a_3}.$$