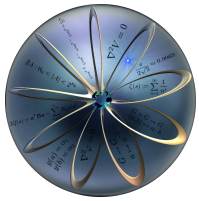

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silver ratio

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The *silver ratio* is the sum of 1 and the square root of 2, represented by the Greek letter delta with a subscript S. That is, $\delta_S = 1 + \sqrt{2}$, with an approximate value of 2.4142135623730950488 (see A014176 in Sloane's OEIS). Its continued fraction is

$$2 + \cfrac{1}{2 + \cfrac{1}{2 + \cfrac{1}{2 + \ddots}}},$$

which suggests that the Pell numbers P_n can be used as convergents. Similarly, the nth power of the silver ratio for $n > 0$ is $P_n\delta_S + P_{n-1}$.