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On the Representation of Certain Reals via the Golden Ratio,
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Abstract

Taking the reciprocal of the golden ratio and summing its non-negative integer powers, we obtain a series that converges. We then consider series obtained by striking out terms of this series, proving key theorems about them and the real numbers to which they converge. Finally, we preassign two-parameter families of real numbers related to the Fibonacci numbers and give their series expansions.