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k-Order Linear Recursive Sequences and the Golden Ratio,
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Abstract

In this paper, we investigate sequences $\{G_{n+1}/G_n\}_{n=1}^{\infty}$ which are approaching the Golden Ratio, where $\{G_n\}_{n=0}^{\infty}$ is a k-order linear recursive sequence of real numbers. We show those cases, where the sequence $\{G_{n+1}/G_n\}_{n=1}^{\infty}$ converges quicker to the Golden Ratio than $\{F_{n+1}/F_n\}_{n=1}^{\infty}$ (F_n denotes the n-th Fibonacci number).