37. Compute a hypergeometric closed form of the sum $s_n = \sum_{k=0}^{n} \frac{4}{(2k-1)(2k+1)}$ by applying Gosper's algorithm.

38. Show that the harmonic numbers $(H_n)_{n\geq 0}$ are not hypergeometric using Gosper's algorithm.

39. For which values of α is $a_k = \binom{2k}{k}\alpha^k$ Gosper summable? Compute $\sum_{k=0}^{n} a_k$ for the admissible values of α.

40. What hypergeometric series F satisfies $zF'(z) + F(z) = \dfrac{1}{1-z}$?