Title: At least two of $\zeta(5), \zeta(7), \ldots, \zeta(35)$ are irrational

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Let $\zeta(s)$ be the Riemann zeta function. We prove the statement in the title, which improves a recent result of Rivoal and Zudilin by lowering 69 to 35. We also show that at least one of $\beta(2), \beta(4), \ldots, \beta(10)$ is irrational, where $\beta(s) = L(s, \chi_4)$ and χ_4 is the Dirichlet character with conductor 4. So $\beta(2)$ is Catalan's constant.

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