

Abstract

The coefficients of a power series $A(x)$ are smooth if a_{n-1}/a_n approaches a limit. If $A(x) = F(G(x))$ and $f_n^{1/n}$ approaches a limit, then the coefficients of $A(x)$ are often smooth. We use this to show that the coefficients of the exponential generating function for graphs embeddable on a given surface are smooth, settling a problem of McDiarmid.