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Title: q -series: dimension estimates, linear independence

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Entire transcendental solutions f of functional equations $f(q^m z) = R_0(z)f(z) + R_1(z)$ with polynomial coefficients R_0, R_1 are arithmetically studied. The purpose of this note is to report on recent progress on lower bounds for the dimension of the K -vector space generated by 1 and the values of these f and their derivatives at m successive powers of q , where K is $\mathbb{Q}$ or an imaginary quadratic number field. In favorable circumstances, linear independence can be obtained, even in a quantitative form.

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