



Generalizations of Ramanujans Continued fractions

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In this article we continue a previous work in which we have generalized the Rogers Ramanujan continued fraction (RR) introducing what we call, the Ramanujan-Quantities (RQ). We use the Mathematica package to give several modular equations for certain cases of Ramanujan Quantities-(RQ). We also give the modular equations of degree 2 and 3 for the evaluation of the first derivative of Rogers-Ramanujan continued fraction. More precicely for certain classes of (RQ)'s we show how we can find the corresponding continued fraction expansions-S, in which we are able to evaluate with numerical methods some lower degree modular equations of this fraction and its derivatives. A systematicaly method for evaluating theoritically certain (RQ)'s (not for all) and their derivatives, with functions used by Ramanujan himself, is presented. We give applications and several results.

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