

Title: A mysterious family of elementary combinatorial identities  
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Abstract: This talk is about a family of combinatorial identities at the level of calculus; for examples see page 21 of <https://arxiv.org/pdf/2002.06455.pdf> These identities are known, and they are relatively easy to check numerically. However they are remarkably resistant to direct proof. In this talk I will do my best to explain the origin of the identities and some of the problems which they suggest.