

# Multiple Divided Bernoulli Polynomials and Numbers

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This work defines multiple divided Bernoulli polynomials by solving a system of difference equations that generalizes the classical Bernoulli case. These polynomials are required to span an algebra whose product matches the  $M$  basis of  $QSym$ . Although not unique, an explicit and notable solution is constructed using the reflection equation for Bernoulli polynomials.