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Mizan Rahman* (mrahman@math.carleton.ca), School of Mathematics and Statistics, Carleton University, 1125 Colonel By Drive, Ottawa, ON K1S 5B6, Canada. *An explicit polynomial form of a q-analogue of the 9-j symbols.*

By using the transformation formulas of the basic hypergeometric series we obtain a number of different forms of the orthonormal q-analogue of the 9-j symbols introduced by the author in an earlier paper. Among them is an explicit polynomial expression in 2 variables that has some familiar 2-dimensional orthogonal polynomials as special cases. We also consider some limiting cases of the 9-j symbols. (Received July 21, 2008)