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q-analogues of Naruse's hook-length formula for skew shapes.

The celebrated hook-length formula of Frame, Robinson and Thrall from 1954 gives a product formula for the number of standard Young tableaux of straight shape. No such product formula exists for skew shapes but there are determinantal and positive formulas involving Littlewood-Richardson coefficients. In 2014, Naruse announced a positive formula without these coefficients and very close to the formula for the straight shape case. We give two q -analogues of Naruse's formula involving semistandard Young tableaux and reverse plane partitions of skew shape. We show that the Hillman-Grassl correspondence is a bijection explaining these q -analogues. (Received August 11, 2015)