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Jonathan Webster* (jwebster@bates.edu), Bates College: Department of Mathematics, 3 Andrews Road, Lewiston, ME 04240. *Computations in Cubic Function Fields of Characteristic Three.*

We give an account of arbitrary cubic function fields when the underlying finite field has characteristic three. Defining a standard form for the underlying cubic curve allows us to easily calculate the discriminant, the genus, the splitting of any place, and an integral basis for the ring of integers. We state a composition and reduction algorithm for the ideal class group in the case that the infinite place is totally ramified. (Received September 14, 2010)