1158-17-97   **Gregory P. Wene*** (`gpwene2011@hotmail.com`), 7342 Oak Manor Dr, APT 7109, San Antonio, TX 78229. *The Hypercube Semigroup.*

An m-dimensional hypercube A, $m \geq 1$, as an array of n^m elements belonging to a field; the elements are denoted by $A_{ij\ldots u}$ where there are m subscripts, and each varies from 1 to n. Knuth (J. Algebra 2 (1965), 182-217) introduced hypercubes as a generalization of the display of the structure constants of a finite semifield. We examine the semigroup formed by these under a binary composition suggested by Knuth in that article. (Received February 24, 2020)