1003-E1-262 **Jeffrey A Oaks*** (`oaks@uindy.edu`), Dept. of Mathematics & Computer Science, 1400 E. Hanna Ave., Indianapolis, IN 46227. *The meanings of al-jabr and al-muqābala in Arabic algebra.*

Al-jabr (restoration) and *al-muqābala* (confrontation) are the names of two steps in the solutions of equations in medieval Arabic algebra. Combined into a phrase, *al-jabr wa'l-muqābala* was the name given to the art of algebra. Our word "algebra" in fact derives from *al-jabr*.

Previously historians have assumed that the two words were technical terms for specific operations, which led them to conclude that the medieval Muslims were confusing and inconsistent in their terminology. We show, instead, that the words were used according to their everyday meanings, and that they were not tied to particular operations. Furthermore, we have found an intermediate use of the phrase *al-jabr wa'l-muqabala* which links the individual terms to the name of the art. (Received September 03, 2004)