We have offered a two-week intensive (3.5 hours/day) summer course in History of Computation targeted at middle school teachers. The course discusses the development of different representations of numbers and multiplication and division algorithms, false position, logarithms and slide rules, abacuses, and other topics. We connect these topics to proportional reasoning, introductory algebra, and other aspects of the common core standards for the middle school curriculum. Reaction from teachers has been very favorable. (Received September 21, 2011)