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Numbers and Numerical Algorithms in China and Medieval Islam

There are a number of striking similarities between numeration systems and arithmetic procedures in China and medieval Islam. Including use of decimal place value system, algorithms for multiplication and the extraction of roots, the approximation of irrational quantities, and the arrangement of whole numbers in magic squares. We shall survey these similarities and conclude with a consideration of the extent to which they suggest direct or indirect historical connections. Or are they simply results of clever people in two cultures working with common tools on common problems?