## 1107-01-285

Duncan J. Melville<sup>\*</sup> (dmelville@stlawu.edu), Dept. of Mathematics, St. Lawrence University, Canton, NY 13617. The Role of Third Millennium Metrology in the Development of the Mesopotamian Sexagesimal Place-Value System. Preliminary report.

Some recently published metrological tables from the second half of the third millennium indicate a systematic exploration of linkages between length and area metrologies. The extension into small units was something the prevailing metrological systems were particularly ill-equipped to handle. The response was a development of sexagesimally-based sub-units. In this paper we argue that these sexagesimal explorations indicate a stage in the development of sexagesimal numeration towards a fractional and, ultimately, place-value system. (Received January 17, 2015)