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The literature on Mesopotamian mathematics has already identified that an intuitive concept of similarity of figures was in use in mathematical cuneiform tablets, especially in rectangular figures and in the techniques of false position and bundling.

In this paper, I examine tablets VAT 8512, Str 367 and YBC 4675, that present problems that are related to the equal division of the area of a trapezium by means of a segment parallel to the bases. The procedure employed is a one-direction compression of the figure and the application of a standard rule to divide the new figure; calculations involving proportionality bring the results back to the original figure. Further, in Str 367, a reasoning involving three parallel segments can be understood only if we assume an underlying concept of proportionality.

As a result, I point to a new contribution to the study of similarity of figures in Mesopotamian mathematics: we should separate the concept of figures having the same shape, that is, all linear dimensions in a proportion, from the concept of figures having only certain parallel dimensions in a proportion. If in other ancient traditions the first concept became more operative, in Mesopotamian mathematics problems were solved by mean of the second one. (Received February 20, 2008)