

# A New Approach in Determining the Criteria of Equations for Morphometric Characteristics of River Basins - Applied Morphometric Study of The Mamaran Basin.

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- **Abstract:** This study aimed at some of the criteria used to determine the form of the river basins, and exposed the need to modify some of its limitations. In which, the generalization of the elongation and roundness ratio coefficient criterion was modified, which was set in a range between (0-1). This range goes beyond determining the form of the basin, which gives it an elongated or rounded feature, and the ratio has been modified by making it more detailed and accurate in giving the basin a specific form, not only a general characteristic. So, we reached a standard for each of the basins' forms regarding the results of the elongation and circularity ratios. Thus, circular is (1-0.8), and square is (between 0.8-0.6), the blade or oval form is (0.6-0.4), Triangle is (between 0.4-0.2), Rectangle (0.2-0). The calibration was applied to the basins of area being studied, and proved a great match between the results and reality of these basins. The criterion of the form modulus and the buckling modulus of the basins were also modified according to the results of the study regarding the Mamaran basin and its auxiliary basins.
- **Keywords:** River basins, elongation and roundness ratio coefficient criterion,