Year: 2006 | **Vol.: 69** | **Fasc.: 4**

Title: New characterizations of W-curves

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We prove that a curve in a Euclidean space of arbitrary dimension is a W-curve if and only if the chord joining any two points on the curve meets the curve at the same angle. Moreover, W-curves in Euclidean 3-space $\mathbb{E}^3$ are characterized with two more general conditions. In particular, we prove that a curve in $\mathbb{E}^3$ is a W-curve if and only if the difference of the values of cosine of the two angles between the curve and the chord joining any two points on the curve depends only on the arc-length of the curve between the two points.

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