ESTIMATING THE SECOND TYPE ELLIPTIC INTEGRAL AND OVAL CIRCUMFERENCE BY INTERPOLATION METHOD

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Abstract

Various methods have been already proposed to approximately identify the oval circumference. Most of proposed equations for the approximation of oval circumference are not accountable in specific scenarios. The equation offered by Gauss-Kummer, Ramanujan, Lindner, Euler and Kepler for ellipse with eccentricity of $e = 1$, which is an obvious case, is approximately calculated. In this paper, an equation to approximately determine the oval circumference with low