

“A NEW APPROACH TO CALCULATE SINUSOIDAL VALUES”

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ABSTRACT

Sinusoidal functions are one of the most fundamental functions for STEM branch. Every student from his secondary standard and onwards experiences their necessity at every next step. Motive of this article is to enlighten schooling students about an equation which provides satisfactory sine values. This method is based upon the linear interpolation for an interval of 5° . Obtained values are very much close to their natural values and hence, are helpful for rough estimation of engineering problems in the absence of trigonometric tables and calculator. Methodology applied to obtain this equation is purely analytical and have no any derivational roots. Maximum deviation of obtained values from their sinusoidal values is 0.009 only so it can be applied widely if change in 1° hardly matters.

KEYWORDS: Arithmetic Progression (A.P), Greatest Integer Function $[X]$, Linear Interpolation Remainder Operator (a % b)