

Abstract Submitted
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Computing the Period of a Pendulum ERIC ODEN, KENDALL RICHARDS, Southwestern University — Using Gaussian hypergeometric functions, there is a particularly simple computable approximation for the period of a pendulum as a function of its maximum angular displacement θ . In contrast to other approximations, the associated relative error of this approach is less than 0.0000165 for all $\theta \in [-\pi/2, \pi/2]$.

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