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Article

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Arithmetic Identities Involving Bernoulli and Euler Numbers

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Abstract.

By applying the formal power series method to elementary trigonometric sums, we establish four classes of arithmetic identities involving Bernoulli and Euler numbers, including the recent formulae due to Liu and Luo (2005).

Mathematics Subject Classification (2000).

Primary 11B68 Secondary 05A19

Keywords.

Concepts found in this article

What is this?

Power Series Method   Arithmetic Identity   Euler Number   Bernoulli Number

Trigonometric Expansion   Convolution Formula

Related articles containing similar concepts (110 articles)

Classification of Harmonic Functions in the Exterior of the Unit Ball

Akhmet'ev, P. · Khokhlov, A. in *Mathematical Notes (2004)*

Matrix power series method for nonlinear problems of optimal regulator construction

Lovchakov, V., et al. in *Automation and Remote Control (2011)*

A Korovkin-Type Approximation Theorem and Power Series Method

Özgüç, İ. · Taş, E. in *Results in Mathematics (2016)*

[*On the dynamic response of beams on elastic foundations with variable modulus*](#)

Foyouzat, M. · Mofid, M. · Akin, J. in *Acta Mechanica (2015)*

[*Stability analysis of viscoelastic curved pipes conveying fluid*](#)

Zhong-min, W., et al. in *Applied Mathematics and Mechanics (2006)*

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