

$\log \sin x$

JORDAN BELL

That

$$\int_0^{2\pi} \log |1 - e^{i\theta}| d\theta = 0.$$

is used in the proof of Jensen's formula.

Euler [2, §§35–37], [3, §21], [4]

Class number formula

Koyama and Kurokawa [6]

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Theorie analytique, Fourier, Chapter III, Sect. III, p. 149, no. 183, Fourier series for  $\log \sin$

sect. 192 of *Introductio in analysin*, chap. 11

cotangent series: E128

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Oeuvres completes de N. H. Abel, tome II, p. 92 Sur quelques integrales definies

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Isaac Todhunter pp. 65–66 §51 A Treatise on the Integral Calculus and Its Applications with Numerous Examples 1874 Macmillan and Co. Fourth ed.

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[5, p. 8]

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