

# 23. Bernoulli and Euler Polynomials— Riemann Zeta Function

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$$\zeta(n) = \sum_{k=1}^{\infty} \frac{1}{k^n}, \quad 20D$$

$$\eta(n) = \sum_{k=1}^{\infty} \frac{(-1)^{k-1}}{k^n}, \quad 20D$$

$$\lambda(n) = \sum_{k=0}^{\infty} \frac{1}{(2k+1)^n}, \quad 20D$$

$$\beta(n) = \sum_{k=0}^{\infty} \frac{(-1)^k}{(2k+1)^n}, \quad 18D$$

$$n=1(1)42$$

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$$\sum_{k=1}^m k^n, \quad n=1(1)10, \quad m=1(1)100$$

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The authors acknowledge the assistance of Ruth E. Capuano in the preparation and checking of the tables.

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