ON A FUNCTION ASSOCIATED WITH THE GENERALIZED
EULER CONSTANT FOR AN ARITHMETIC PROGRESSION

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Abstract. The function $\mathfrak{L}(q) = \sum_{p|q} \frac{\log p}{p-1}$ appears in a work by D. H. Lehmer, where he studies a generalization of the Euler constant. In this short note, we obtain lower and upper bounds for $\mathfrak{L}(q)$.

REFERENCES

[1] D. H. LEHMER, *Euler constants for arithmetic progressions*, Acta Arith. **27** (1975), 125–142.
[2] J. BARKLEY ROSSER & L. SCHOENFELD, *Approximate Formulas for Some Functions of Prime Numbers*, Illinois J. Math. **6** (1962), 64–94.

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