

1106-VQ-2655 **Mits Kobayashi*** (mkobayashi@csupomona.edu), Department of Mathematics and Statistics,
Cal Poly Pomona, 3801 West Temple Avenue, Pomona, CA 91768. *A generalization of a series for
the density of abundant numbers.* Preliminary report.

We call a number abundant if the sum of the proper divisors of the number exceeds the number itself. In 1933, Davenport proved that the set of abundant numbers has a natural density. Since then, several improvements have been made to determine upper and lower bounds for this density. A recent result uses the multiplicative function $\sigma(n)/n$ to express the density as a series which can be used to find a lower bound for the density. We present how this result can be generalized to a large class of multiplicative functions. (Received September 16, 2014)