BOUNDS FOR THE DENSITY OF ABUNDANT INTEGERS

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ABSTRACT. We say that an integer n is *abundant* if the sum of the divisors of n is at least $2n$. It has been known that the set of abundant numbers has a natural density $A(2)$ and that

$$0.244 < A(2) < 0.291.$$

We give the sharper bounds

$$0.2474 < A(2) < 0.2480.$$