## There is No Largest Prime Number

Euklid of Alexandria<sup>1</sup> and Archimedes of Syracuse<sup>2</sup>

We show by a very general argument [1] that it is impossible for there to be only finitely many primes. The basic conclusion follows from

## Lemma 1.

$$\sim p_{n+1} \not\mid p_1 p_2 \cdots p_n.$$

It is hoped that the audience will provide conjectures to enrich this material.

[1] A. of Syracuse, E. of Alexandria, "Conjectures regarding divisibility of integers", to appear.

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