PROOF OF THE INFINITUDE OF THE SET OF PRIME NUMBERS.

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2 Introduction.

It is attempted to demostrate that the set of prime numbers is infinite by the method of reduction to absurdity. It is proposed that there is a last prime number and by performing some simple mathematical considerations, a contradiction about what is proposed is obtained.

3 Demonstration.

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The set of odd natural numbers is infinite. If there were a finite number of prime numbers, the set of composite numbers would be finite, since this set is obtained as a product of all posible combinations of prime numbers.

Thus we arrive at a contradiction, that the set of odd natural numbers is the union of two sets whit a finite number of numbers.

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