**Another proof on infinity of prime numbers.**

*David Nauhgthen from Manchester grammair school did talk on pirme numbers....*

The existence of infinite set of pairwise coprime numbers implies the existence of infinite set of prime numbers. Indeed let $\{n_k\}$ be an infinite set of copirme nimbers: $(n_i \neq n_j$ and $(n_i, n_j) = 1)$. Let $p_i$ be an arbitrary divisor of $n_i$. Then all $p_i$ are distinct,

How to form the infinite sequence of coprime numbers.

Two examples:

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$$n_k = 2^{2^k} + 1\,, k = 1, 2, 3, \ldots$$

This is the famous example of coprime nimbers

Another example: $n_1$ is an arbitrary number $n_1 > 1$ and

$$n_{k+1} = \prod_{i=1}^{k} n_i + 1\,.$$

This proof seems to be "fresh"