CONJECTURE (GENERAL FERMAT NUMBERS)

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Let's consider a, b integers ≥ 2 and k an integer such that a, c $=1$.

One constructs the function $P(k) = a^{b^k} + c$, where $k \in 0,1,2,...$.

Then:

a) For any given triplet a, b, c there is at least k_0 such that $P(k_0)$ is prime.

b) There doesn't exist a triplet a, b, c such that $P(k)$ is prime for all $k \geq 0$.

c) Is it possible to find a triplet a, b, c such that $P(k)$ is prime for infinitely many k's?