Review of: "A Number-Theoretic Proof of the Solvability of Polynomials"

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Potential competing interests: No potential competing interests to declare.

Report on the article entitled: "**A Number-Theoretic Proof of the Solvability of Polynomials**"
by **Shahid Nawaz**

In this manuscript, the author considers the solvability of polynomials by partition functions. He attempts to prove that, in general, a polynomial of degree 5 is not solvable in radicals, and his proof relies on a particular partition function. For the main result (proof of Theorem 1), it is necessary to clearly show the relationship between the solvability and the partition defined by Denition 1, because otherwise the given proof will not make sense.
For the above reasons, I regret having to recommend the rejection of this article.
In what follows, I report some remarks on the paper.
- In the introduction, it is important that the author explains the concept of the solvability of a polynomial by radicals.
- The partition function is not defined.
- In Theorem 1, the expression "Let p(n) be the partition of n" may be "Let p(n) be the number of partitions of n".
- Since the references contain book titles, I think it is necessary to indicate the pages linked to the paper.
- Some authors are cited in the introduction but do not appear in the references.