

Review of: "Symmetric Key generation And Tree Construction in Cryptosystem based on Pythagorean and Reciprocal Pythagorean Triples"

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Potential competing interests: No potential competing interests to declare.

The author has builded an idea related to a novel mechanism for key generating used in symmetric encryption in the manuscript. He/she claimed that Pythagorean and Reciprocal Pythagorean Triples can be used for key generation. I think that some major revisions are needed for the manuscript as below:

1. In abstract, first sentence; 'secure are critical to the security' is so weak and it should be re-written.
2. In abstract, 'The KDC authenticates authenticate.....' seen wrongly written and so it should be re-written.
3. In Introduction, first sentence; From the references should be used instead of From the References. (Not capital letter)
4. In the first paragraph of the introduction, the equation of Pythagorean triples has not been written using a convenient style according to other equations in the manuscript.
5. The author should explain what does self-assertivematch mean?
6. The author should explain what do +ve integers mean? It seen written wrongly.
7. In the second page, the first sentence should not be written with bold characters.
8. In case 1, x_2 is written with 'a' but x_3 is written 'a (math type)'. x_2 should be re-written.
9. In case 1.2, There fore should be re-written as 'Therefore'.
10. In case 1.4, the author should explain the notations of the sets Z^2 and $Z^3(P)$ as 'Let Z^2 and $Z^3(P)$ be the sets of....respectively' for instance.
11. In case 1.4, $\phi(F_{\{n\}}, F_{\{n+1\}}) = (.....)$ has an unnecessary left paranthesis. It should be re-written.
12. In table 4, first row and third column, there is a wrong left paranthesis. It should be re-written.
13. The note before case 2, the author should give more details related why it is so. The current sentence of the author is so weak.
14. The sentence before Corollary 2.1 has no a verb. It should be checked.
15. The sentence before Table 7, 'From Case 2.2, if ..., now we can set of' instead of the current sentence. (So, the author should be careful about capital letters.)
16. Case 2.6.2: 'Choosing x as an even integer' should be used instead of 'By choosing x is an even integer'.
17. Why has the author written Case 2.6.3 by bold characters while the other cases are not so?
18. In the sentence before Lemma 2.2, '...., since' should be utilized instead of '..... . Since...'

19. In Lemma 2.2, 'then then...' should be corrected.
20. In the proof of Lemma 2.2, 'It follows that if (x,y,z) ' should be used instead of 'It follows that If (x,y,z) '.
21. In the last sentence of the proof of Lemma 2.2, there is no dot notation (.) .
22. In the proof of note before, why the author use bold characters. Besides, it is better to say Lemma, theorem, proposition... etc. instead of 'note'.
23. Why the author use bold characters in Case 4?
24. The first sentences of Main work and the sentences before 'Construction of Pythagorean triple for n-tuple' are exactly same and have many mistakes. So, they should be re-written.
25. In the sentence 'As illustrated in the given Figure...' has no any figure number. So, the author should substitute a number for the mentioned figure.
26. Corollary of the manuscript has many sentences which are exactly same in the previous section 'Application of Pythagorean Triple in Cryptosystem'. So the conclusion is weak.
27. Many of the references have a lot of mistakes. Especially [5], [10],[11],[12],[13],[14],[15],[16],[21],[22],[23],[24],[25],[26],[27].
28. Consequently, grammar in the sentences of the manuscript, the importance of the originality, conclusion are so weak. Therefore, I think that the manuscript can not be an academic article in this form. Decision: Major Revision