

# Review of: "Additive and Multiplicative Operations on Set of Polygonal Numbers"

Farideh Khoeini<sup>1</sup>

<sup>1</sup> Isfahan University of Technology

**Potential competing interests:** No potential competing interests to declare.

Hi, Dear Dr. Gabriele,

I hope this email finds you well.

I think that this paper is written well, but there is some incertitude in the text.

1. It would be better if the author used "Theorem" for results such as  $P(k,m)+P(k,n)$  and  $P(k,m)*P(k,n)$ . (Cases 8, 9, 10, 11 will be proofs for this "Theorem")
2. The author wrote the result for  $P(k,n)$  ( $n<0$ ) in the abstract, but there isn't a proof for it in the paper.
3. Also, I think that it will be better to determine amounts for "m" and "n" in  $P(k,m)+P(k,n)$  and  $P(k,m)*P(k,n)$  throughout the paper. (For example, Part B)
4. It is proven that  $Hx_{-}(n)=T_{-}(2n-1)$  and  $3P_{-}(n)=T_{-}(3n-1)$ . So it will be better if you mention them before Case 4.

Best regards,

Khoeini