

**If I Could Write Mathematics It Would be a Novel: A new Approach;  
Curiosity and What $\Leftrightarrow$ How $\Leftrightarrow$ Why**

**&  $\leftrightarrow$  (?  $\leftrightarrow$  \*  $\leftrightarrow$ !)  $\leftrightarrow$  (*Find*, ...  $\leftrightarrow$  *Analyse*, ...  $\leftrightarrow$  *Deduce*, ...)**

O. Gercek and M.E. Gercek

*Department of Computer Engineering, Girne American University, Mersin 10, Turkey  
ogercek72@gmail.com*

**Abstract:** The beauty of mathematics and geometry can be discovered by young people and children through stories. In this project, we opened a new window in the field of actual mathematical articles with an interesting, remarkable and curious writing. In this writing, we have tried to convey misunderstandings and/or misconceptions of mathematics to many people from seven to seventy years of age in a fun, enjoyable and coherent way. We aimed to bring readers together with "If I Could Write Mathematics, It Would be a Novel", which will consist of mathematical stories within the nature of the basic concepts and proofs of geometry and mathematics.

In order to start with a sample story in this corner, we shared my daughter's project that she had done in fifth grade with contribution of a new approach. In her project, she aimed to describe the number of  $\pi$ , one of the most mysterious numbers in mathematics, in a story style to her classmates and to many people from seven to seventy years of age who could understand without feeling bored or annoyed by making it fun, enjoyable, easy and clear with a different, original method. Moreover, a new approach has been presented with hints and the questions "What $\Leftrightarrow$ How $\Leftrightarrow$ Why" in this story to actual mathematics story books that have not been made so far. Thus, we have demonstrated in a fun way how to learn many concepts, methods of proof and geometric drawing with a new and curious approach; hints, noticeable warnings, remarkable questions and signs in different colors.

**Keywords:** Mathematics education, proof methods, mathematical reasoning

**2010 Mathematics Subject Classification:** 97A99, 97E50, 03F03, 97E50

## References

- [1] A. Umay, *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 24: 234–243 (2003).
- [2] G. Hanna, *Educational Studies in Mathematics*, 44: 5–23 (2000).
- [3] A. J. Stylianides, D. L. Ball, *Journal of Mathematics Teacher Education*, 11: 307–332 (2008).