About Book: „**THE GEOMETRY OF NATURE**"

The book „**THE GEOMETRY OF NATURE**" (authors' representative and publisher is Proven Grupa Inc.) is a direct connection and association with the geometric shapes in nature (where the name was tracked from, The Geometry of Nature), in color has 108 pages, 73 tasks, 31 examples and 205 images, and is intended for:

• All math lovers,

• Gifted Students (of all ages),

• Students,

• Teachers,

• Parents,

Where the illustrations show how math at its highest levels can successfully be taught to the youngest children, and not just a high school or college students.

The geometry of nature is dedicated to working with children at 5th level (the highest) of van Hiele's theories as well as at the highest level of Bloom's taxonomy. Van Hiele's theory suggests that students in regular education cannot arrive at 5th level, while this book allows; together with the use of computers and dynamic geometry software *Sketchpad*®, to catch up with the unsuspected level of knowledge.

5th level of van Hiele, in theory, is indicated as:

Mathematical rigor

• The object of the opinion: deductive axiomatic systems of geometry

• Product opinions: a comparison of different axiomatic systems of geometry (Euclidean and non-Euclidean geometry).

Particularly book's section on Gielis formula is written, about the generalization of Pythagorean formula and its "relationship" with nature (Biology!) and trigonometry.

Gradually, systematically and very detailed concepts are explained, with a very large number of examples and tasks, it makes easier and successful to graduate completely brand new mathematician's views on common geometrical procedures.

The contents of the book deal with the study and visualization (with the use of the program *Sketchpad*®) definitions of distances and its generalizations. All the concepts of elementary geometric objects in the plane and their definitions in different geometries are envisioned, in accordance with the definition of a distance in that geometry.

Systematically are publicized the second-order curves, as well as the trigonometric functions and their graphs in those other/different geometries, because in the education of the Republic of Croatia is continuously emphasized the comparison of Euclidean geometry with other geometries.

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