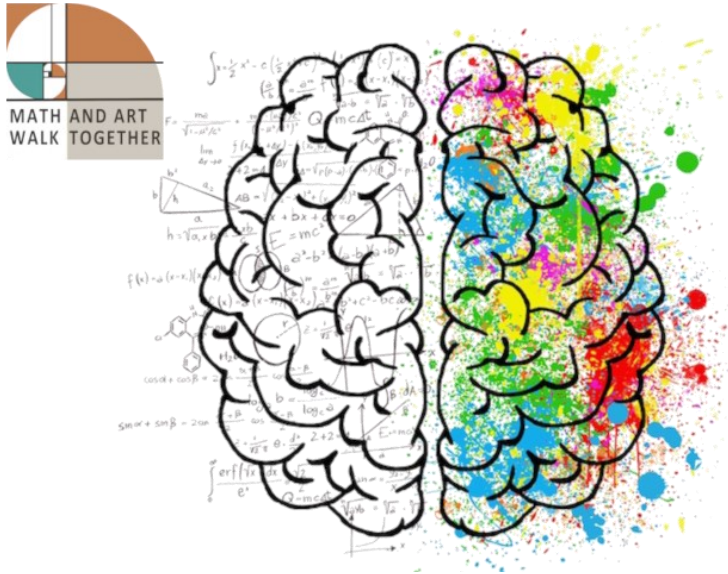


Lesson notes in fractal geometry



Some of the most frequently asked questions helpful in understanding issues of the Science, technology, engineering, and mathematics education.

Where to observe fractals in nature?

Fractals are repeating geometric patterns that can be found in many natural occurrences, such as river networks, mountain ranges, lightning bolts, blood vessels, and DNA.

What does tessellation mean?

Tessellations are patterns found in nature that tile over the surface of an object, such as honeycombs.

How are Fibonacci numbers expressed in nature?

The Fibonacci Sequence occurs when crisscrossing spirals produce an optical effect, like the florets of a sunflower. These florets, when counted, turn out to be Fibonacci numbers.

What is a tesseract?

Tesseract is a cube in a four-dimensional space, also known as a hypercube. It is a shape with numerous faces and sides extruding in any number of dimensions. These shapes can help to explain multiple dimensions in the space around us.

Where to find polyhedron in nature?

Polyhedra are geometric solids in three dimensions with flat faces and straight edges. Irregular polyhedra can be found within nature in the form of crystals and viruses.

Where are Bézier curves used?

Bézier curves are straight lines corresponding to different positions at slightly different angles to give the appearance of the curve. A popular use of Bézier curves is a suspension bridge.