

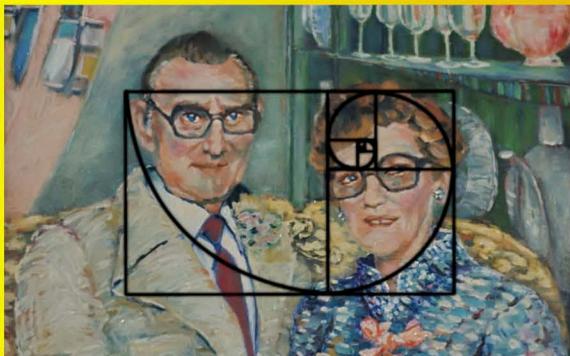


Real-world Uses of the Golden Ratio

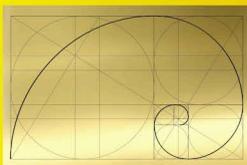
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Tory Jensen



I have found the golden ratio interesting because it's not something that is often forced into being, rather, it seems to be a result that stems from efficiency and aesthetics. In nature, you can find examples of both coming to fruition, such as the field of flowers that bloom in the field. You can find examples of the efficiencies of the golden ratio in our own constructions. Along with examples of aesthetics used within our own art, a lot of the time without the artist realizing that the golden ratio is prevalent in their work. And when engineering meets art? There are examples of the golden ratio producing both efficiency and aesthetic, just as in nature. Whether intentional or not, the prevalence of the golden ratio throughout nature and our own world just feels right.



Abstract

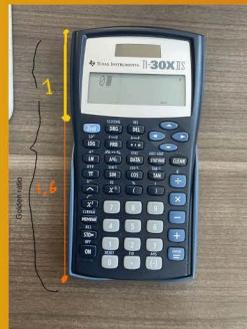
The golden ratio is an irrational number equal to ~ 1.6 . It appears when a line is divided into two parts where the ratio between the two parts is 1 to ~ 1.6 . The golden ratio has fascinated mathematicians, artists, architects, and designers for hundreds of years, as it is often associated with being an aesthetically pleasing proportion. The students of Discrete Mathematics explore this phenomena by finding objects in their life where they can observe the golden ratio.

Reference

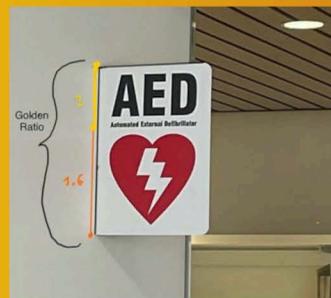
[1] Golden Ratio = Mind Blown! https://www.youtube.com/watch?v=c8ccsE_IumM

Arona Diagne

I took this picture of a calculator that embodies the principles of the golden ratio, a mathematical concept often associated with aesthetically pleasing proportions. The golden ratio, approximately equal to 1.618, has been utilized throughout history in art, architecture, and design to create harmonious compositions.



In this particular instance, the plastic cup will be crafted to reflect these aesthetic principles, ensuring that its shape and dimensions are not only functional but also pleasing to the eye. The design will incorporate the golden ratio in its height, width, and overall curvature, resulting in a cup that embodies both practicality and beauty. If you would like to visualize this concept.



In this particular case, the wall picture will be designed with meticulous attention to the dimensions and proportions that embody the golden ratio. By adhering to this principle, the artwork will not only be striking and captivating but will also evoke a sense of harmony and equilibrium within any space it occupies. The interplay of length and width will be thoughtfully considered to ensure that the final piece stands out while maintaining a pleasing visual flow. If you wish to see this concept visually represented.

Wisdom Aperweh Sabudam

The Golden Ratio is really cool because it shows up in so many places like nature, art and even everyday things like shoes. Shoes aren't just designed for comfort because their shape, the curve of the sole and even the placement of the laces might follow this pattern without us even realizing it. That could be part of why some shoes just look right to us. In the YouTube video "Golden Ratio = Mind Blown", the presenter says learning about the Golden Ratio changed her life because once you see it, it sticks with you forever. I get that because now I'm curious to check my own shoes and see if they follow the golden ratio pattern.



Rose Cronk

This picture I took of R2D2 at Planet Comic Convention (ComiCon) at the Kansas City Convention Center in Kansas City, Missouri, in March 2024 showcases the golden ratio of 1:1.6. After learning about the golden ratio, I found it inspiring, especially in relation to art and photography. I believe that scenes, objects, or subjects incorporating the golden ratio can spark inspiration for artists or photographers, helping them capture the essence they aim to recreate.



Dudley Chery

The Golden Ratio, a mathematical proportion that spans from roughly 1 to 1.6, indicates that the longer component of a split line or shape relates to the shorter piece in the same way that the full relation does to the longer portion.

The idea of the Golden Ratio is really intriguing, and it's simple to understand why it has drawn so much interest. I believe that the true worth of the Golden Ratio is found in its capacity to stimulate creativity and curiosity. It's a tool that can be utilized to make designs that look good. It also makes me consider why the Golden Ratio was purposefully employed in the works of so many well-known architects and painters, including Leonardo da Vinci. Is it something that people are drawn to, or did they realize it would enhance the aesthetic appeal of their artwork and structures? In any case, it's amazing how a straightforward mathematical ratio can have such a significant impact on our surroundings.

One thing that caught my attention in particular is that the Golden Ratio isn't limited to art or mathematics; it can also be found in things as basic as the arrangement of seeds in a sunflower or the form of a smartphone screen, your toothbrush, hairbrush, cups and much more. This alters my perspective on how nature and design combine to produce aesthetically beautiful forms.

I found the YouTube video "Golden Ratio = Mind Blown!" to be a very captivating explanation of the subject. The presenter's statement, "When I learned about the Golden Ratio, it changed my life," made sense to me. Once you are aware of it, you begin to see it everywhere. It helps you recognize the underlying structure that underlies the beauty we observe in the environment.

All things considered, the Golden Ratio captivated me because it integrates creativity, arithmetic, and logic in meaningful and useful ways. It caught my interest and led me to consider how we may intentionally use this ratio to improve the balance and aesthetic appeal of everyday objects, such as furniture setups, website designs, photographs and more.

