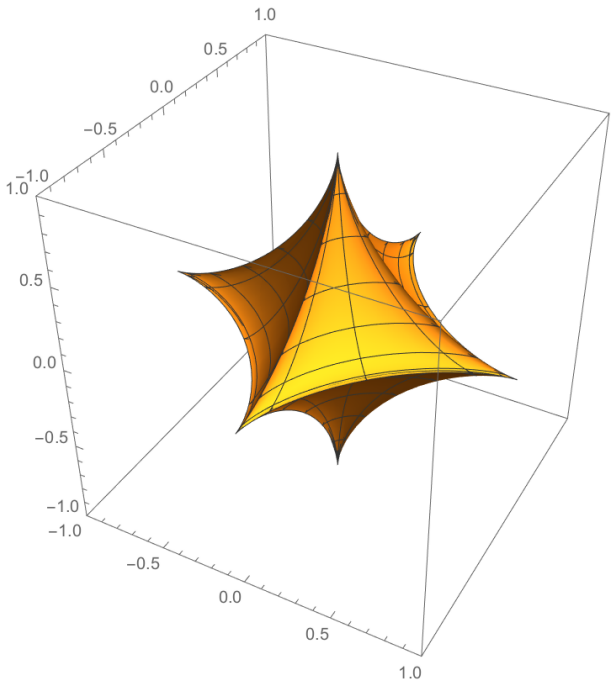


Gaussian Curvature

Amar_04, Aritra12, i3435, Pluto1708, NJOY, TLP.39, PhoenixFire, Sumit Rajput, Math_and_me, yayitsme, Mindstormer, SA2018, Sir Gurunadham , Ajay Lakhina Sir, Vikash Tiwari Sir, Dr.Vex, MathematicisLovely, Rama1728, Geometrix, EpicNumberTheory, dauxtrong, Supercali, chrono223, Starchan, gghx, IndoMathXdZ, Mathlogician, Quantum_Fluctuation, Functional_Equation, Mr.C,Krish Kumar, PCChess, Detoasty3, Awesome_guy, KKR, EricShi1685, Nikinessean, Keith50, Prabh1512, Rwitabrata

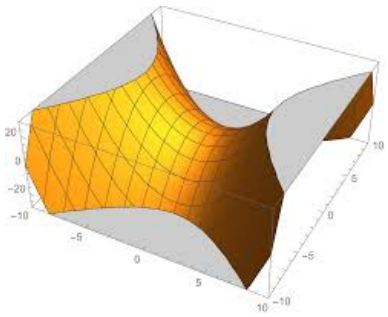
Contents

0.1 Gaussian Curvature

A brief note first of all what our title actually means

Definition (Gaussian Curvature)— Gaussian curvature is an intrinsic measure of curvature, depending only on distances that are measured on the surface, not on the way it is isometrically embedded in Euclidean space. This is the content of the Theorema egregium.

Gaussian curvature is named after Carl Friedrich Gauss, who published the Theorema egregium in 1827. [1]



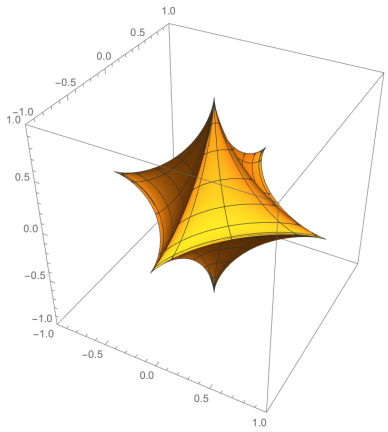
Carl Friedrich Gauss

Johann Carl Friedrich Gauss was a German mathematician and physicist who made significant contributions to many fields in mathematics and science. Sometimes referred to as the Princeps mathematicorum and the greatest mathematician since antiquity, Gauss is ranked among history's most influential mathematicians. He has contributed immensely in the fields of number theory, geometry, probability theory, geodesy, planetary astronomy, the theory of functions, and potential theory (including electromagnetism).

[1] To know more about it visit here.

Key Features of GC

- GC will provide free mathematical olympiad "mock" contests to help students prepare for regional, national, or international level contests such as IMO(International Mathematical Olympiad) , USAMO(United States of America Mathematical Olympiad) , AIME (American Invitational Mathematics Examination), AMC(American Mathematics Competitions) , Sharygins, etc.
- GC will provide free mathematical high quality handouts on various important olympiad topics such as Inequalities, Functional Equations, Geometry, Number Theory, complex numbers, different techniques, standard methods or on overall comprehensive handouts etcetera. Some examples of our works are
  - ☐ pqr method (phoenixfire, Aritra12)
  - ☐ Wonderful Schur's Inequality (Aritra12)
  - ☐ Olympiad Triangle Configuration(i3435)
  - ☐ Advanced Lemmas in Geometry (Fedir Yudin aka Mindstormer)
  - ☐ An Interesting Property of Quadratic Polynomials (Aritra12 , Do Xua Trong)
  - ☐ A breif Intro to Inequalities Part 1 (Rama1728, Aritra12, Phoenixfire)
- GC will provide solutions to problems in some highly useful olympiad books which don't already have them.
- After some range of time, when we will be fully established, we will provide free classes on various topics of non-routine mathematics and camps



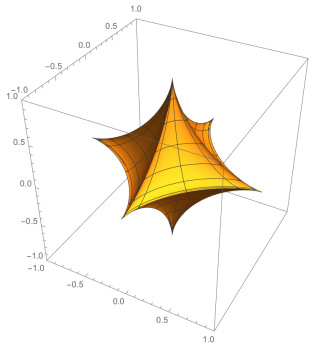
0.2 About Us

Who we are?

We are group of mathematical olympiad students who admire mathematics to a great extent. We wish to spread the joy of solving and recognising the non-routine level of mathematics and encourage all the math lovers who are yet to discover or have already discovered it. Some people admire mathematics to a great extent, but for some reason can't get access to materials to further their interest. As such, we are doing everything free for all.

What our Philosophy is

Sharing knowledge is not about giving people something, or getting something from them. That is only valid for information sharing. Sharing knowledge occurs when people are genuinely interested in helping one another develop new capacities for action; it is about creating learning processes.
—Peter Senge



It created a global platform that allowed more people to plug and play, collaborate and compete, share knowledge and share work, than anything we have ever seen in the history of the world.
–Thomas Friedman

0.3 Team Classification

USAMO/IMO Team

- This team writes and conducts contest helpful for INMO, IMOTC , IMO , USAMO and various types of examination of that level.
- This team writes useful original handouts of their own which are helpful for appearing in contests such as INMO, IMOTC, IMO, USA(J)MO and various types of examination of that level.
- This team also works on books without solutions that are aimed at the olympiad level.
- This team is comprised of the AoPSers[2]
  Amar_04, Aritra12, i3435, Pluto1708, NJOY, TLP.39, PhoenixFire, Sumit Rajput, Math_and_me, yayitsme, Mindstormer, SA2018, Sir Gurunadham , Ajay Lakhina Sir, Vikash Tiwari Sir, Dr.Vex, MathematicisLovely, Rama1728, Geometrix, EpicNumberTheory, dauxtrong, Supercali, chrono223, Starchan, gghx, IndoMathXdZ, Mathlogician, Quantum_Fluctuation, Functional_Equation & Mr.C.

AMC/AIME Team

- This team writes and conducts contest helpful for AMC , AIME , PRMO and various types of examination of that level.
- This team writes useful original handouts of their own which are helpful for appearing in contests such as AMC , AIME , USAJMO and various types of examination of that level. This team also works on books which are unsolved , which books are internationally , nationally appealed for this level.
- This team is comprised of the AoPSers
  Krish Kumar, PCChess, Detoasty3, Awesome_guy, KKR, EricShi1685, EpicNumberTheory, Nikinessean, Keith50, Prabh1512, Rwitabrata.

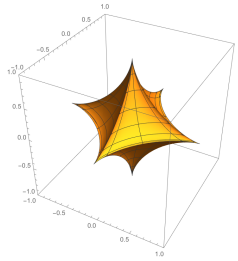
[2] The AoPS Website

Test Solver Team

- This team checks and review the questions made by the above two teams and judges them. They make sure that the questions have correct solutions and try to find more efficient solutions.
- This team also works on correcting the solutions that the above two teams have added to books that did not previously have solutions.

Proof Reader team

- This team checks and review the handouts made by the first two teams and judge them.
- This team helps the test-solver team in making sure that solutions to books are correct.

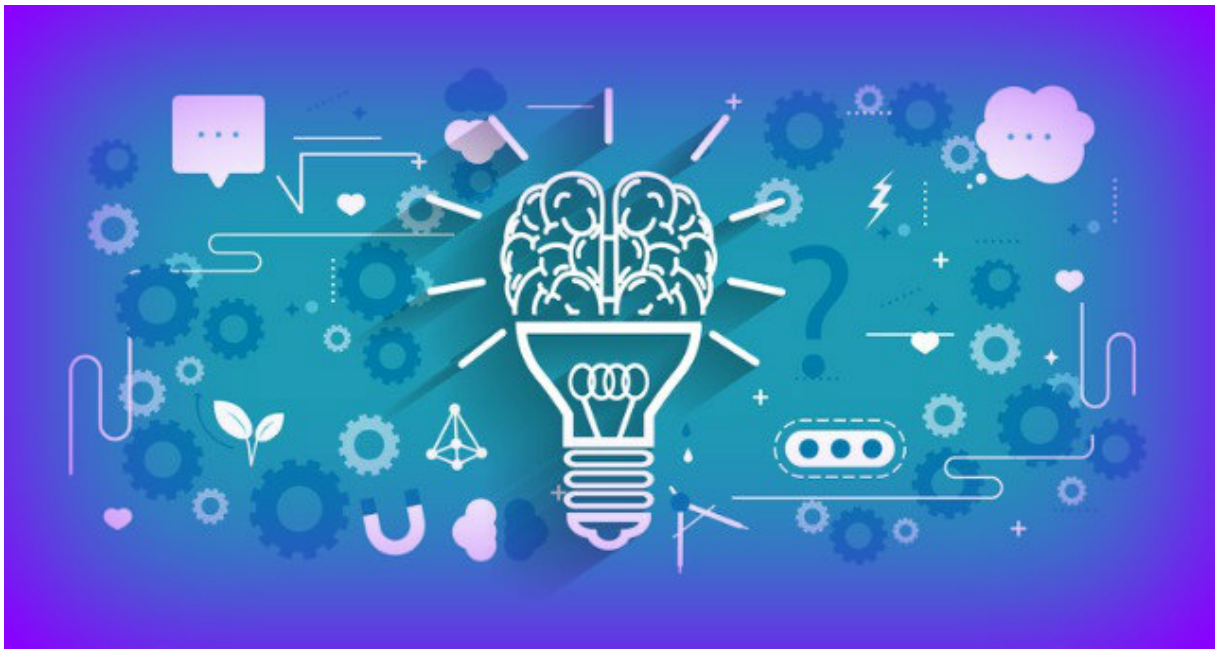


Graphics Team

- This team deals with our website management and organization. They work to make the website look better and be more flexible for communication.

0.4 Contact Us

To address any problem or question you may have, email us at gaussiancurvature360@gmail.com



Thanks for reading about us