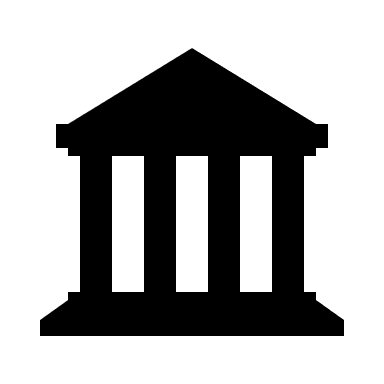
Print suggestion: 16 pages in 1 sheet

From page 2 to 27

African



Society of Appraisers

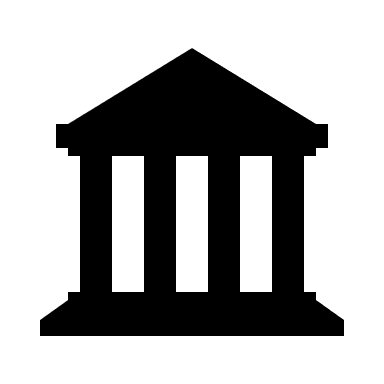
Fee: 50€

Fee with 2 memberships: 60€

Fee with 3 memberships: 80€

Fee with 4 memberships: 100€

European



Society of Appraisers

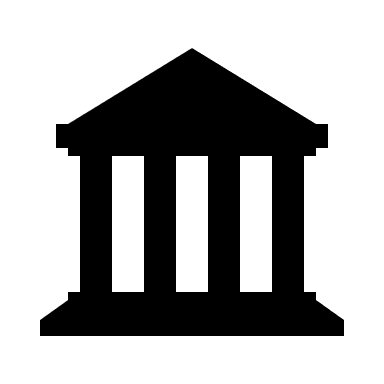
Fee: 100€

Fee with 2 memberships: 120€

Fee with 3 memberships: 150€

Fee with 4 memberships: 200€

American



Society of Appraisers

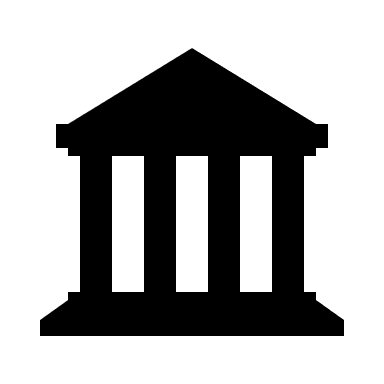
Fee: 150€

Fee with 2 memberships: 160€

Fee with 3 memberships: 200€

Fee with 4 memberships: 300€

Asian



Society of Appraisers

Fee: 200€

Fee with 2 memberships: 250€

Fee with 3 memberships: 300€

Fee with 4 memberships: 400€

Cost: 50€

Fee: 10€

with color set: 15€

with 1 Badge of Authenticity: 20€

with 2 Badges of Authenticity: 30€

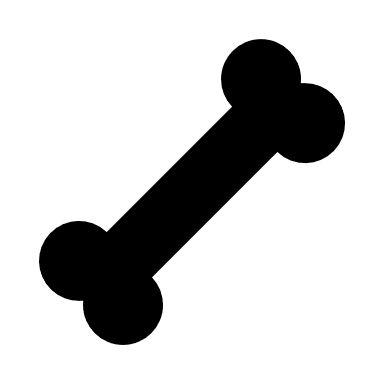
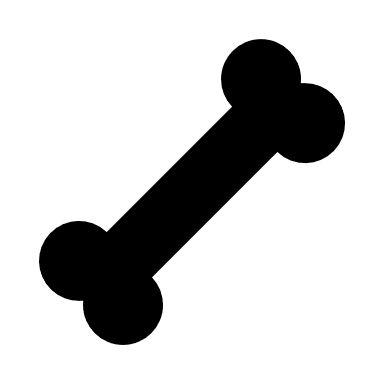
with 3 Badges of Authenticity: 40€

with 4 Badges of Authenticity: 50€

with Certificate of Authenticity: 100€

Badges cost 100€

Certificates cost 200€



Ishango Bone

History:

Ishango Bone

The Ishango Bone is a tool dated to the upper Paleolithic era, about 18000 to 20000 BC. It consists of a deep brown bone with a sharp piece of quartz attached at the end, used perhaps for engraving. It was discovered in 1950 by Jean de Heinzelin de Braucourt in the area of Ishango in Africa. Tally marks were found on the bone suggesting a mathematical understanding that goes beyond counting.

Cost: 50€



Fee: 10€

with color set: 15€

with 1 Badge of Authenticity: 20€

with 2 Badges of Authenticity: 30€

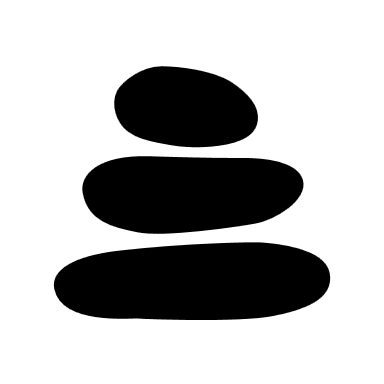
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with Certificate of Authenticity: 100€

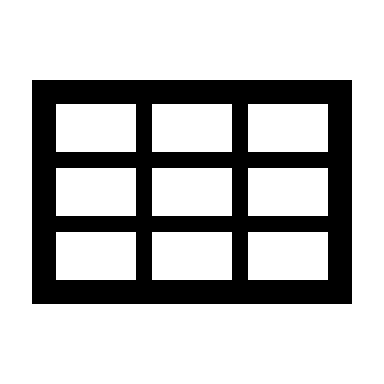
Badges cost 100€

Certificates cost 200€

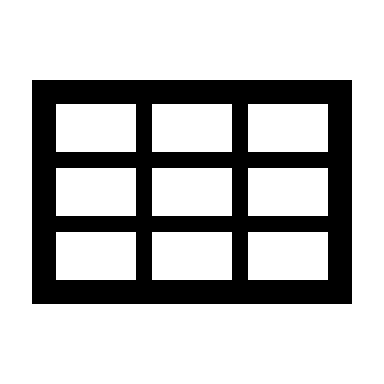


Mesopotamian counters

These consist of clay tokens dated back to (as the name suggests) the Mesopotamian era. It is believed that scribes and merchants at the time used these three-dimensional tokens as counters to represent certain quantities, units, or goods. Thousands of these were found in archaeological sites across the middle east.



The Plimpton 322 was a Babylonian clay tablet created around 1750 BCE in Sumerian, during the reign of Hammurabi the Great. This tablet contains Pythagorean triples, such as (3,4,5) although it dates more than 1000 years before Pythagoras.

Plimpton 322 

Cost: 60€



Fee: 10€

with color set: 15€

with 1 Badge of Authenticity: 20€

with 2 Badges of Authenticity: 30€

with 3 Badges of Authenticity: 40€

with 4 Badges of Authenticity: 50€

with Certificate of Authenticity: 100€

Badges cost 200€

Certificates cost 400€

Two clay tablets from the Yale Babylonian collection, said to have been created between 1800 and 1600 BCE contain exercises by student scribes calculating the area of different geometric shapes. One showing the area of the trapezium and another showing that of a sphere, approximating pi to be 3.

Cost: 60€



Fee: 10€

with color set: 15€

with 1 Badge of Authenticity: 20€

with 2 Badges of Authenticity: 30€

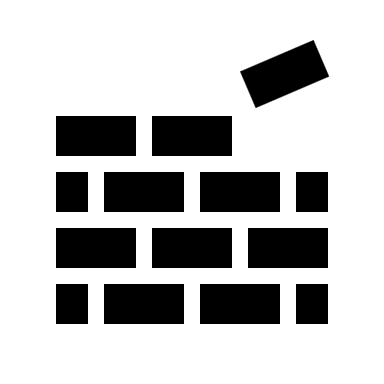
with 3 Badges of Authenticity: 40€

with 4 Badges of Authenticity: 50€

with Certificate of Authenticity: 100€

Badges cost 200€

Certificates cost 400€

Babylonian Area Tablets

The Rhind Papyrus is among the most well-known mathematical documents from ancient Egypt, dated to around 1550 BCE, written by a scribe called Ahmose. This papyrus is 2 meters long and contains 84 problems about multiplication, division, fractions, and geometry. The papyrus is speculated to be used as a kind of textbook by other scribes.

Cost: 60€



Fee: 10€

with color set: 15€

with 1 Badge of Authenticity: 20€

with 2 Badges of Authenticity: 30€

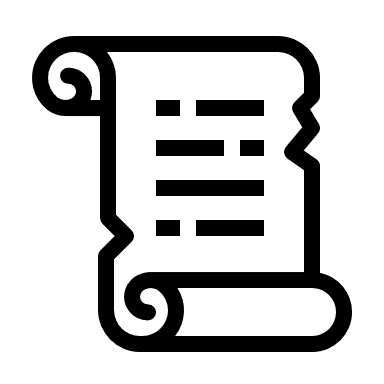
with 3 Badges of Authenticity: 40€

with 4 Badges of Authenticity: 50€

with Certificate of Authenticity: 100€

Badges cost 200€

Certificates cost 400€

Rhind Papyrus 

Cost: 70€



Fee: 10€

with color set: 15€

with 1 Badge of Authenticity: 20€

with 2 Badges of Authenticity: 30€

with 3 Badges of Authenticity: 40€

with 4 Badges of Authenticity: 50€

with Certificate of Authenticity: 100€

Badges cost 200€

Certificates cost 400€

Euclid of Alexandria in 300 BCE wrote “The Elements”, a collection of 13 books that contained mathematical definitions, postulates, theorems, and proofs covering topics such as geometry and number theory. It is one of the most famous and influential works in the history of Mathematics.

Euclid’s Elements geometric shape Icon 3550108

A palimpsest is a scroll or parchment from which the text has been washed or scraped off so that it can be reused, a common method in the Middle Ages used by even scientists and mathematicians. A Greek copy of the work of the great Archimedes of Syracuse created around 1000 CE in Byzantium has been found which was later overwritten by Christian Monks in Palestine.

Cost: 70€



Fee: 10€

with color set: 15€

with 1 Badge of Authenticity: 20€

with 2 Badges of Authenticity: 30€

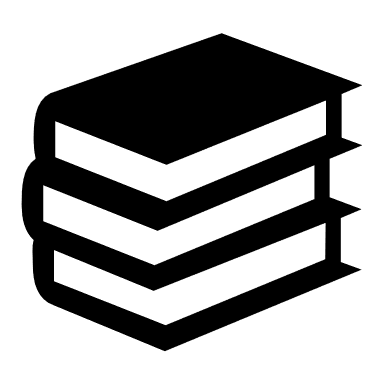
with 3 Badges of Authenticity: 40€

with 4 Badges of Authenticity: 50€

with Certificate of Authenticity: 100€

Badges cost 200€

Certificates cost 400€

Archimedes Palimpsest 

Suàn Shù shū (筭數書), meaning “Book of Numbers and Computation” is one of the oldest manuscripts from China. This book was written around 200 BCE and consists of 200 strips of bamboo. This book contains 69 problems, each with a solution covering topics such as arithmetic, fractions, integer factorization, geometric sequences, inverse proportions, unit conversion, and error handling.

Cost: 70€



Fee: 10€

with color set: 15€

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with 2 Badges of Authenticity: 30€

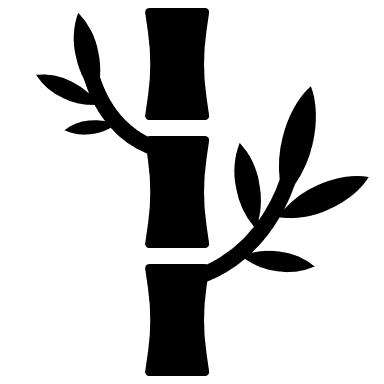
with 3 Badges of Authenticity: 40€

with 4 Badges of Authenticity: 50€

with Certificate of Authenticity: 100€

Badges cost 200€

Certificates cost 400€

Suàn shù shū 

This was an inscription of stone showing the oldest known use of the number zero, dating back to the Khmer civilization in Cambodia around the year 683 BCE. Part of the text contains the number 605 with a ‘.’ used as the number zero. Many ancient civilizations such as the Greeks and Romans, did not have a ‘zero’ in their numerical system.

Cost: 80€



Fee: 10€

with color set: 15€

with 1 Badge of Authenticity: 20€

with 2 Badges of Authenticity: 30€

with 3 Badges of Authenticity: 40€

with 4 Badges of Authenticity: 50€

with Certificate of Authenticity: 100€

Badges cost 200€

Certificates cost 400€

Khmer Zero angkor wat Icon 4693871

Al-kitāb al-mukhtasar fī al-jabr wa’l-muqābala, commonly known as Al Jabr, translates to “The Compendious book of Calculations by Completion and Balancing.” This book was written by the Persian Mathematician Muhammad bin Mūsā al-Khwārizmī around 820 CE and established algebra as a new area of mathematics. Algebra being derived from the word Al Jabr.

Cost: 80€



Fee: 10€

with color set: 15€

with 1 Badge of Authenticity: 20€

with 2 Badges of Authenticity: 30€

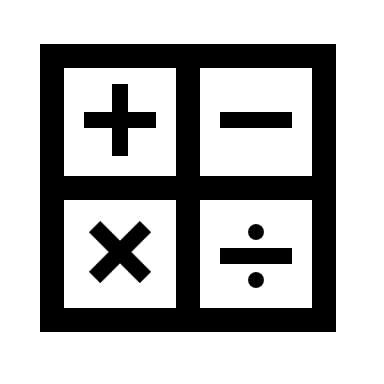
with 3 Badges of Authenticity: 40€

with 4 Badges of Authenticity: 50€

with Certificate of Authenticity: 100€

Badges cost 200€

Certificates cost 400€

Al-Jabr 

The Lilāvatī was the first volume of a series of books written by Bhāskara II, one of the greatest mathematicians and astronomers in medieval India. It was published around 1150mand was written for his daughter. He writes in the Lilavati about problem solving, number sequences, Pythagoras theorem, combinatorics, and many other topics.

Cost: 80€



Fee: 10€

with color set: 15€

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with 2 Badges of Authenticity: 30€

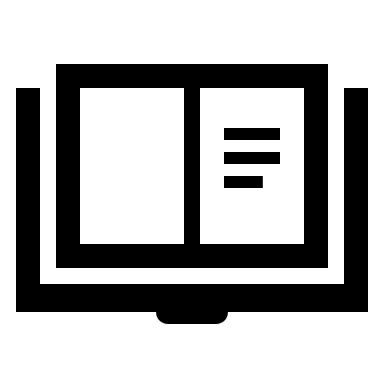
with 3 Badges of Authenticity: 40€

with 4 Badges of Authenticity: 50€

with Certificate of Authenticity: 100€

Badges cost 200€

Certificates cost 400€

Bhāskara’s Lilavati 

The Siyuan Yujian, meaning “Jade Mirror of the Four Unknowns” is a masterpiece of Chinese mathematics published in 1303 by Zhu Shijie. It consists of four individual books and 288 different problems. Zhu presents a way to solve systems of linear equations with up to 4 variables. He shows how to eliminate variables and how to find the side length of two- and three-dimensional shapes, given their area. Zhu can also be seen using numbers in Pascal’s triangle more than 300 years before Pascal was born.

Cost: 90€



Fee: 10€

with color set: 15€

with 1 Badge of Authenticity: 20€

with 2 Badges of Authenticity: 30€

with 3 Badges of Authenticity: 40€

with 4 Badges of Authenticity: 50€

with Certificate of Authenticity: 100€

Badges cost 200€

Certificates cost 400€

Siyuan Yujian stack Icon 23915

Luca Pacioli was a mathematician who authored the book ‘De Divina Proportione’, published in 1509. When he needed illustrations for his book, he asked the well renowned artist and former student, Leonardo Da Vinci to do so. Da Vinci created 60 different images of polyhedra, often solid versions as well as a transparent version that only shows the edges. This was a completely new way to represent 3 dimensional solids.

Cost: 90€



Fee: 10€

with color set: 15€

with 1 Badge of Authenticity: 20€

with 2 Badges of Authenticity: 30€

with 3 Badges of Authenticity: 40€

with 4 Badges of Authenticity: 50€

with Certificate of Authenticity: 100€

Badges cost 200€

Certificates cost 400€

Da Vinci's Polyhedra Shape

Description automatically generated with low confidence

The codex was created by Indigenous painters in the mid 16th century, probably at the behest of the first Viceroy of New Spain, Antonio de Mendoza. It provides a general overview of Aztec history and daily life along with the marking of years and a calendar. This codex also included plans for their city foundation.

Cost: 90€



Fee: 10€

with color set: 15€

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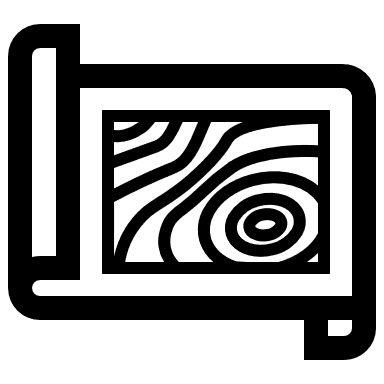
with 3 Badges of Authenticity: 40€

with 4 Badges of Authenticity: 50€

with Certificate of Authenticity: 100€

Badges cost 200€

Certificates cost 400€

Codex Mendoza 

Descartes Analytical geometrylayers Icon 1663234

René Descartes, also known as the father of analytical geometry, in his book ‘La Géométrie’ published in 1637 established an equivalence between algebraic operations and geometric constructions. He did this by introducing a unit length that served as a reference for all other lengths and for all operations among them. This was the first time something like this had been done in mathematics.

Cost: 100€



Fee: 10€

with color set: 15€

with 1 Badge of Authenticity: 20€

with 2 Badges of Authenticity: 30€

with 3 Badges of Authenticity: 40€

with 4 Badges of Authenticity: 50€

with Certificate of Authenticity: 100€

Badges cost 200€

Certificates cost 400€

Isaac Newton is best known for inventing calculus in the mid to late 1600s, almost a decade before Leibniz independently did the same, and albeit more influentially. Newtonian calculus now sees usage in physics, chemistry, biology, economics, and pure mathematics, along with all branches of engineering. Calculus is also known as the field of mathematics based upon insight.

Cost: 100€



Fee: 10€

with color set: 15€

with 1 Badge of Authenticity: 20€

with 2 Badges of Authenticity: 30€

with 3 Badges of Authenticity: 40€

with 4 Badges of Authenticity: 50€

with Certificate of Authenticity: 100€

Badges cost 200€

Certificates cost 400€

Newton Calculus 

Leonard Euler method of integral calculus, published from 1768 to 1770 was the first complete textbook published on integral calculus. Euler in volume 1 made breakthroughs concerning the integration of logarithmic and exponential functions.

Cost: 100€



Fee: 10€

with color set: 15€

with 1 Badge of Authenticity: 20€

with 2 Badges of Authenticity: 30€

with 3 Badges of Authenticity: 40€

with 4 Badges of Authenticity: 50€

with Certificate of Authenticity: 100€

Badges cost 200€

Certificates cost 400€

Euler Calculus quadrant Icon 3079081

Noether’s theorem proven by mathematician Emmy Noether in 1915 states that every differential e symmetry of the action of a physical system with conservative forces has a corresponding conservation law. According to this theorem, Noether also states that the Laws of Physics are symmetric in space, time, and rotation.

Cost: 150€



Fee: 10€

with color set: 15€

with 1 Badge of Authenticity: 20€

with 2 Badges of Authenticity: 30€

with 3 Badges of Authenticity: 40€

with 4 Badges of Authenticity: 50€

with Certificate of Authenticity: 100€

Badges cost 200€

Certificates cost 400€

Noether’s Symmetry symmetry Icon 5378837

Annie Jean Easley was a mathematician, computer scientist and rocket scientist who worked for the Lewis Research Centre of NASA. She was a leading member of the team which developed the software for the Centaur rocket stage. She was also one of the first African Americans to work at NASA.

Cost: 150€



Fee: 10€

with color set: 15€

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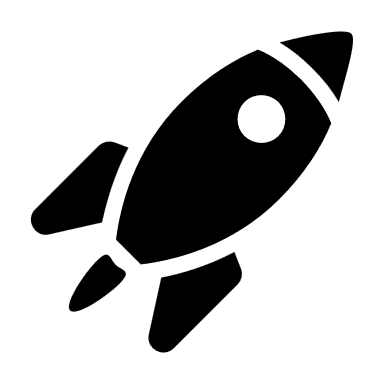
with 3 Badges of Authenticity: 40€

with 4 Badges of Authenticity: 50€

with Certificate of Authenticity: 100€

Badges cost 200€

Certificates cost 400€

Easley’s Centaur 

Gaussian algorithm, also known as row reduction, is an algorithm for solving systems of linear equations, named after Carl Friedrich Gauss (1777-1855), although some special cases of the method was known to Chinese mathematicians as early as 179 AD (albeit without proof). The general confusion of this system’s origin led to it being named after Gauss in the 1950s in order to teach it in high schools.

Cost: 200€



Fee: 10€

with color set: 15€

with 1 Badge of Authenticity: 20€

with 2 Badges of Authenticity: 30€

with 3 Badges of Authenticity: 40€

with 4 Badges of Authenticity: 50€

with Certificate of Authenticity: 100€

Badges cost 200€

Certificates cost 400€

Gaussian Algorithm brackets Icon 2508950

Boolean Algebra is a division of mathematics that deals with operations of logical values, incorporating binary variables. This method traces its origin back to a book published in 1854 by George Boole known as ‘The Mathematical Analysis of Knowledge’.

Cost: 200€



Fee: 10€

with color set: 15€

with 1 Badge of Authenticity: 20€

with 2 Badges of Authenticity: 30€

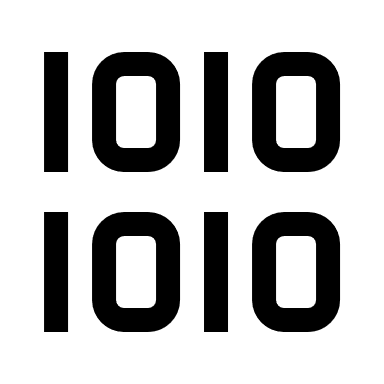
with 3 Badges of Authenticity: 40€

with 4 Badges of Authenticity: 50€

with Certificate of Authenticity: 100€

Badges cost 200€

Certificates cost 400€

Boolean Algebra 

The pattern of numbers on Pascal’s triangle can was known well before Pascal’s time. The first formulation of which was written by the Persian mathematician, Al-Karaji (953-1029) in his now lost book. It was later repeated by another Persian mathematician, Omar Khayyám (1048-1131), which lead to it being called Khayyám triangle in Persia. There were multiple other mathematicians who came to the same conclusion including mathematicians from China and Europe. Pascal’s ‘Traité du triangle arithmétique’, published in 1655 shows multiple results collected by Pascal about the triangle and how to employ it in solving problems in probability theory.

Cost: 200€



Fee: 10€

with color set: 15€

with 1 Badge of Authenticity: 20€

with 2 Badges of Authenticity: 30€

with 3 Badges of Authenticity: 40€

with 4 Badges of Authenticity: 50€

with Certificate of Authenticity: 100€

Badges cost 200€

Certificates cost 400€

Pascal’s Triangle honey comb Icon 1028891

Print suggestion: 9 pages per sheet from pages 29 to 71

Exercise Question

exercise Icon 4717712

Solve SLE:

4a − 6b + c = 1

2a − b + c = 5

−6a + 3b − 2c = − 3

Exercise Question

exercise Icon 4717712

Solve SLE:

3x + y - z = 1

x - y + z = -3

2x + y + z = 0

Exercise Question

exercise Icon 4717712

x=2+3i and y=1−i

Express the Polar Form of z=xy

Exercise Question

exercise Icon 4717712

x=1 is a solution.

Find the remaining roots of z = x^4 + x^3 + x^2 + 3x − 6

Exercise Question

exercise Icon 4717712

v1=(3,4,2); v2=(3,2,1); v3=(7,10,0); v4=(2,2,3).

Calculate (v1×v3)·v2

Exercise Question

exercise Icon 4717712

v1=(3,4,2); v2=(3,2,1)

if v1 is the tension force and v2 is direction, what’s the resultant force projected on v2?

Exercise Question

exercise Icon 4717712

A plane has points A:(1,3,4) B:(5,5,5) C:(4,7,4).

Express its equation in the normal and coordinate forms.

Exercise Question

exercise Icon 4717712

Find

Exercise Question

exercise Icon 4717712

Find

Exercise Question

exercise Icon 4717712

Compute and give its domain

Exercise Question

exercise Icon 4717712

Find antiderivative

Theoretical Question



What is the Fundamental Law of Algebra?

Theoretical Question



What is Heron’s Method?

Theoretical Question



What did Complex Numbers allow for in terms of the number System?

Theoretical Question



When does an SLE not have solutions?

Theoretical Question



When does an SLE have infinite solutions?

Theoretical Question



When does an SLE have unique solutions?

Theoretical Question



When is an SLE in row-echelon form?

Theoretical Question



What does the exponentiation of Complex numbers do?

Theoretical Question



Name 3 scalar and 3 vector quantities

Theoretical Question



Which mathematical algorithm converts a Plane equation from coordinate to parameter form?

Theoretical Question



When is the Dot Product 0?

Theoretical Question



When is the Cross Product 0?

Theoretical Question



When is a function continuous?

Theoretical Question



What is Fermat’s Theorem?

Theoretical Question



What is the first part of the Fundamental Theorem of Calculus?

Theoretical Question



What is the second part of the Fundamental Theorem of Calculus?

Theoretical Question



What is a Critical Point in curve sketching?

Theoretical Question



What is a Point of Inflection in curve sketching?

Theoretical Question



What is

LUCK

luck Icon 1826951

Experts admire your collection, you get 10€ for each relic you own.

LUCK

luck Icon 1826951

Experts question the legitimacy of your collection, pay 10€ for each relic you own

LUCK

luck Icon 1826951

You get a Jail Free card, which you can use next time you are imprisoned

LUCK

luck Icon 1826951

You tried to forge fake documents for your relics, go to jail!

LUCK

luck Icon 1826951

You made a room with low temperature and low humidity to store relics, pay 200€

LUCK

luck Icon 1826951

You forgot to pay shipping taxes; you must pay 20€

LUCK

luck Icon 1826951

Your “Relic Informant” charges you for their services, pay 50€

LUCK

luck Icon 1826951

Move 3 steps forward

LUCK

luck Icon 1826951

Move 4 steps back

LUCK

luck Icon 1826951

Memberships have a rewards system, get 10€ for every membership.

LUCK

luck Icon 1826951

You look tired, go take a rest

LUCK

luck Icon 1826951

Membership is costly, pay 100€ per Appraisers membership you have

LUCK

luck Icon 1826951

Delegating is an important skill, choose a person to answer your next TQ or EQ