



FOTOGEBRA 2022

*Contest: Mathematics, Photography and
GeoGebra VII Edition*

Recipients

This contest is aimed at students from public or private educational institutions of secondary education (SE) and Teacher Training Institutes, from Argentina, Spain, Portugal, other Latin American countries, and has now been opened to English speaking participants.

Entry to the contest is free and for educational purposes only.

Depending on the year they are studying, the following categories are established:

CATEGORY 1: Middle School or equivalent - ages between 12 to 14 years old

CATEGORY 2: High School or equivalent - ages between 15 to 18 years old

CATEGORY 3: College Freshmen or Sophomores in Student Teacher Training, or equivalent educational institution (adults)

CATEGORY 4: College Juniors or Seniors in Student Teacher Training, or equivalent educational institution (adults)

Presentation of the photographs

A. Dates

Entry stage: Entries are due by November 1, 2022

Evaluation stage: November (date to be confirmed)

Exhibition of shortlisted works: November (date to be confirmed)

Delivery of prizes: December (date to be confirmed)

Voting dates, and the date of the closing ceremony and recognition of the outstanding works will be communicated via the official website and social networks.

B. Description of the work

The objective of the contest is to create a piece of visual work that uses a photograph in which some mathematical content stands out or can be studied, which will be included in a construction made with GeoGebra.

The construction with GeoGebra will incorporate photography and all those objects or elements that the authors consider appropriate.

In addition, from the photograph a problematic situation and its resolution are proposed, with the help of the GeoGebra software.

The material that the participants must send will be published in GeoGebra Resources and will include, in addition to the Geogebra applets with the image, the problematic situation and its analysis, a comment about the place where the photograph was taken should also be reported. Likewise, other elements that you consider necessary (video, text, images, etc.) may be included, as long as it does not exceed the maximum number of words allowed (800) (See previous editions).

In addition, the participants will send to the indicated address a copy of the image used to make their proposal.

Each photograph must contain:

- a- "Title/motto" (phrase, word or symbol), which refers to a mathematical concept or notion.
- b- Planning and resolution of a problematic situation.
- c- Algebraic justification of the expression(s) and/or calculations produced by GeoGebra.
- d- Text of a **maximum of 800 words**, which will include a description of what has been done with GeoGebra and the appreciations that they wish to share regarding the completion of the work, as well as any comment or clarification that the authors deem appropriate to write.

The photographs and problematic situations presented by the students of the

1st and 3rd categories must contemplate in their resolution the modeling of the problem through ***geometric concepts***. For those presented for the 2nd and 4th categories, they will carry out the modeling of the problem through any ***mathematical function***.

The Organizer may decide to remove from the competition those works whose problems are incomplete and/or incur a mathematical error, as well as if they do not comply with photographic ethics.

With the photographs received, a virtual sample will be made, through social networks, and a physical sample (if the situation allows it), whose participation is optional. Both in the virtual and physical exhibition, a vote will be held for the works presented by popular acclamation, and the winner in each of these instances will receive a "special mention".

C. Number of presentations

Institutions/educational centers will present a maximum of 5 (five) groups for each category, which have resulted from the internal selection, and in turn each group from that institution, made up of two or three students of the same level/ academic year, may submit a maximum of 3 (three) papers.

D. Registration of Institution or educational center and participating students

In a first stage, the tutor/responsible teacher will register the institute or educational center in the form:

- <https://forms.gle/gVUq51cmKgQNw7V17>

After the selection of the competitors, the registration of the participating students, who will represent the institution and its works, will be made through the WORK SUBMISSION FORM available at:

- <https://forms.gle/k9dwWTdtpWXXEbnQ9>

E. Mode of presentation and delivery.

The photograph can be taken with any device. The problematic situation created with it must contain the resolution and justification. It is necessary [to register on the GeoGebra page](#) and upload to the profile, the construction and its analysis. Also, it is necessary to attach the original photograph detailing the georeferenced location and/or a brief description of the image.

(You can refer to the following tutorials:

<https://www.geogebra.org/m/K2ekJs69> and <https://youtu.be/oTQw8e8taW8>)

The works will be sent through the following form:

- <https://forms.gle/k9dwWTdtpWXXEbnQ9>

F. Authorization of people in photography and/or video.

If the image of a person is included in a photograph or video, a note signed by the person portrayed, stating their consent, must be attached (along with the entry). A model of an authorization is found on the registration form.

This cession of rights of the participants and their image and their voice, will be of indefinite form and worldwide scope for use in the media, networks and social media that the contest chooses to publicly communicate the draft.

G. For the face-to-face/physical photographic sample (optional and if the context allows it). You may instead submit your entry digitally.

Participants must present the original photo and another of the same size where the mathematical content is observed (GeoGebra mathematical objects superimposed).

Photos may be black and white, monochrome, or color. They must be delivered on a rigid support (mat or similar) of a neutral color: white, cream or gray and in digital form.

On the rigid cardboard, two photographs of the same size (maximum 35 x 25 cm), the original and the one that GeoGebra throws, in the way that the user considers it. competitor. The problematic situation and its resolution will also be located in the that reference be made to what has been obtained with GGB.

They should not forget to put the slogan or title of the photo.

The photographs sent only in digital form, will participate in the exhibition and vote to be held online, not guaranteeing their inclusion in the sample physical.

H. Sending the photographs for the face-to-face/physical sample (optional and depending on the situation). You may instead submit your entry digitally.

The presentation of the images in **paper format** of the original photograph and the one worked in GeoGebra, with its corresponding problematic situation and resolution, will be sent to the corresponding institution according to the category to participate.

For the works of the participants residing in the Argentine Republic:

- The works that correspond to the 1st and 2nd level, will be approached in advance of the date of the exhibition, to the facilities of the Instituto

Nuestra Señora del Perpetuo Socorro located on Av. Calchaquí 4949, from the city of Quilmes.

- The works that correspond to the 3rd and 4th categories, will be reached at the Higher Institute of Teaching and Technical Training N°24 (ISFDyTN°24), located at 471 Cramer Street between Sáenz Peña and Espora, in the city of Bernal.

In both cases indicated on the packaging: **"PhotoGebra Contest", Prof. Rizzo Karina A.**

For the works of the participants residing in Spain: contact the [Saem Thales association](#).

For the rest of the countries: contact the representative of your country, who will be in charge of sending us your works.

IMPORTANT:

Entries may also be made digitally at the following webpage:
<https://forms.gle/k9dwWTdtpWXXEbnQ9>

I. Judging

The works will be evaluated by a jury, which will be provided with the GeoGebra sheets delivered by the participants.

The jury will be made up of professional photographers and renowned personalities from the academic field, including:

- Agustín Carrillo de Albornoz Torres
- Alejandro Gallardo
- Bernat Ancochea Millet.
- Fabian Vitabar
- Francisco Haro
- Susana Roumieu
- Viviana Costa
- Professors of the INPSocorro and the ISFD and T° 24.
- Members of the GeoGebra Institutes of Ibero-America.

The names of the affected team of teachers will be published on the website and on the page <https://www.facebook.com/FotoGebra/>, after the period for receiving the photographs has ended.

The jury, if it considers it so, may declare any category void. It will assess both the approach to the proposed theme and the decisions made regarding the photographed image, evaluating the works from a scientific, creative and

artistic point of view. In other words, not only the mathematical content involved and that it is aesthetically attractive will be considered, but also the message.

The decision of the Jury will be unappealable.

IMPORTANT:

In order to achieve greater transparency in the voting, by the jury and the public, **no** legends or brands that can be interpreted as advertising, as well as the name of the institution and/or the participants, will be permitted anywhere on the entry.

Any element or detail that refers to the institution or the name of the participant may be cause for direct disqualification.

Images that do not meet these requirements will not be accepted.

The Organizer may recategorize an image if deemed necessary.

J. Results

The participants of the works that will be shortlisted authorize the Organizer to publish their name and the institution they represent, to be used for dissemination purposes, as well as to display their works on the contest page and other areas. The list of participants whose photos are shortlisted will be published at the end of the act of judging them.

K. Distinctions

The jury will award a photograph of each level. Two (2) distinctions and two (2) special mentions will be awarded in each category. If the jury considers it so, it may leave a distinction vacant. In addition, there will be a distinction for "public voting" that visits the physical sample and another for the digitally presented photographs, which will be available on the contest's Facebook page. The public will only be able to choose one image for each category. In case of a tie, it is up to the organization of the contest to dictate the final result.

L. Digital catalog

The jury, together with the organizing committee, will select the images that will form part of a digital catalog that will be made available through the contest page.

M. Transfer of rights

It is an essential condition that the photographs be free of rights and that they correspond to the indicated author.

The participants whose photos are selected, unconditionally and free of charge, assign their reproduction rights to FotoGebra. The works will be used for purposes of promoting the contest and disseminating the project.

Likewise, the authors of the shortlisted works authorize the Organizer to publish their name, institution of belonging and place of residence, within the framework of the dissemination activities of the contest as well as in any related dissemination tool.

FotoGebra undertakes to name the person or institution that submits the work to the contest each time the image is used.

At the end of the physical sample, the authors will be able to withdraw their productions. The photographs not withdrawn will remain at the disposal of the organizers of the contest.

N. Conditions for the implementation of the FotoGebra Contest:






Given that this contest is registered with the national registry of intellectual property and with the National Registry of Patents and Trademarks, in the name of Karina Amalia Rizzo. The following are established as mandatory compliance rules:



- 1- Those who carry out the same must publicly express the name of the author, under warning in case of omission, to initiate the corresponding legal actions.
- 2- Each Institution will designate a tutor, responsible for the registration and follow-up of the participants.
- 3- Each Institution will have the right to select the competitors respecting the conditions of suitability and the principle of equal opportunities for all those interested in participating in the project.
- 4- The author reserves the exclusive right to designate the representatives of this project, from each of the countries that participate in it, as well as to authorize those who are authorized to do so in their name and on their behalf.
- 5- The representatives appointed by each country must report periodically on the progress of each stage as well as the institutions in charge and submit them to the official site of the reference project. www.fotogebra.org. They will also be in charge of organizing the physical exhibition of the photographs in their country.
- 6- The Institutions that are winners will arbitrate the means to receive the prize.


O. Acceptance of the bases


The sole participation in this contest implies the total acceptance of the Bases and conditions. The Organizer is empowered to resolve any contingency not provided for in them. The decisions that are issued in this regard will be unappealable.

Consultations and information

-  www.fotogebra.org
-  <https://www.facebook.com/FotoGebra/>
-  <https://www.instagram.com/fotogebra/>
-  <https://www.youtube.com/c/FotoGebraRizzoK>
-  <https://twitter.com/fotogebra>

-  Complete works of the contest:
<https://www.geogebra.org/u/fotogebra#materials/created>
-  GeoGebra book:
<https://www.geogebra.org/m/dupdmbtw>

-  fotogebra@gmail.com

-  karinarizzo71@gmail.com

THANKS FOR PARTICIPATING!



Guidelines for submission of works
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