Designing with TI Graphing Calculators 2023

Rules and Regulations

Entry to Competition

a) The competition is open to all students studying in a Junior College / Centralised Institute or a Secondary School in Singapore.
b) Each student is entitled to submit only 1 entry and each school is entitled to submit a total of at most 20 entries. Kindly note that this applies to Integrated Programme (IP) schools as well.
c) **Only COLOURED graphical designs from the below models are to be submitted** for the competition.
    i. TI-84 Plus CE
    ii. TI-84 Plus CE Python
d) Each design should be related to the given theme.
e) The main part(s) of the design should be completed using relevant mathematical equations. However, pixel drawing or other forms of drawing can be used to touch up your picture.
f) No imported pictures are allowed in each design.
g) The theme for the year 2023 is "**Cyber Security – Safety on the net, your best bet!**"
h) Closing date for the submission of entries to Mrs Lim-Bay Swee Lian is **26 July 2023 12pm**.

Submission of Entries

a) Each entry has to be submitted using the official entry form (will be forwarded to students whose participation in the competition has been confirmed, on or after 20th March). All sections of the form must be completed.
b) The completed entry forms should be named as <initials of school_name of student>**.doc**, example a student, Tan Ah Beng from Singapore High School, will name entry form as **shs_Tan Ah Beng.doc**.
c) The soft copy of the design should be named as <initials of school_name of student>**.XX** (where the file can be either a **.8ca**, **.8ci** or **.png**), example a student, Tan Ah Beng from Singapore High School, will name the design as **shs_Tan Ah Beng.png**. This can be done after downloading the picture onto a computer via a USB cable and renaming that file. Please refer to **Annex A** for the instructions on how your picture can be saved for submission.
d) Students need to write a paragraph about how the picture was designed and what they have learnt in the process.
e) Students need to provide the details of how the design was created, by attaching the screenshot of the mathematical equations used for each main part of the design and stating the corresponding window setting.
f) The completed entry form and the design should be sent as attachments to your teacher-in-charge who will then send all the entries to **gcdesigncomp@gmail.com** as a school, together with the Excel file, "List of School Participants". The completed list of school participants should be named as <initials of school_List of School Participants>, example, **shs_List of School Participants**.

Judging Criteria

Points will be awarded for originality, creativity, difficulty and suitability.

Prizes

a) The prizes are sponsored by Texas Instruments Southeast Asia Pte Ltd.

b) The best designs will receive the following prizes:

Individual Award	**Prize**
Gold	One TI-Nspire CX II CAS, One TI-84 Plus CE Python and Certificate
Silver	TI-Nspire CX-II and Certificate
Bronze	TI-84 Plus CE Python and Certificate
Participation	Thumb drive and Certificate

c) There will also be prizes for schools with the most number of total entries in the Gold, Silver and Bronze categories.

Position	**Prize**
1st	Sponsorship trip for one teacher to T3 International Conference, USA in 2024 + TI product gift voucher worth S$1000
2nd	Sponsorship trip for one teacher to T3 International Conference, USA in 2024 + TI product gift voucher worth S$700
3rd	Sponsorship trip for one teacher to T3 International Conference, USA in 2024 + TI product gift voucher worth S$500
4th – 10th	TI product gift voucher worth S$500 each

Miscellaneous

a) The decision of the judges is final.

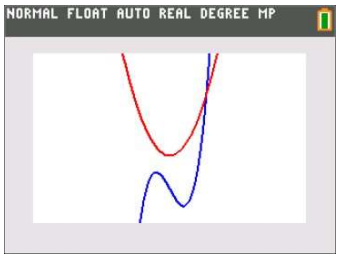
b) The organisers reserve the right to amend any of the above without prior notice.

c) Winners will be informed by TI through their schools.

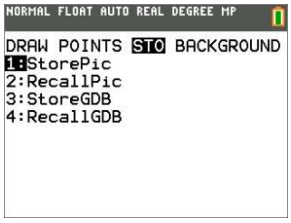
Annex A

Instructions on saving images as .8ci files from the TI-84 Plus CE on the computer

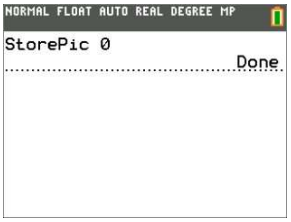
1. First, ensure you have the desired image on your screen. Below is a sample image we will use.



2. Next, press [2nd][prgm] and use the directional pad to select the "STO" section and press 1 for "1: StorePic"



3. This will bring you to the main screen with the "StorePic" function shown. Press any number from 0 to 9 to store it as Pic0 to Pic 9. We will use Pic0 for this case.



4. Next, connect the TI84 Plus CE graphing calculator to the computer and open the TI-Connect CE software.

5. In the software, on the left-hand side, click on Calculator Explorer  .

6. This will then show the list of apps, functions, pictures, images, lists, etc. stored in the connected graphing calculator. Search for Pic0, right-click on the image file you have saved under (i.e. Pic1) and click on "Send to computer".

7. Ensure you know which folder in your computer the image is saved under. Check that folder and you will see the image file saved is a .8ci file.