Republic of the Philippines
Bulacan State University
Laboratory High School
Junior Mathematics Club
City of Malolos, Bulacan

HUMAN CALCULATOR

I. INTRODUCTION

The **Human Calculator** is an annual event organized by the **Junior Mathematics Club (JMC)** to highlight the skills of LabHigh students in analyzing and solving mathematical problems in a collaborative and creative manner. More than just an academic contest, it also emphasizes the importance of teamwork, creativity, and responsibility in preparing for a large-scale school activity. This event serves as the **3rd Quarter Performance Task (PETA) in Mathematics**. Sections or students who fail to participate or contribute will receive a score of zero in this PETA. The event will be held on **January 27, 2026 (Tuesday)** at the **Valencia Hall from 1:00 PM to 5:00 PM.**

II. PARTICIPANTS

Each section is required to have **13 participants** (12 keys + 1 moderator) to represent their class. It is up to the section to decide who will be the moderator and representative for each key. The rest of the class who will not participate in the event *should contribute* to making props and costumes for their representatives. The class officers are required to conduct an **evaluation** after the event to ensure everyone's cooperation and contribution to their section's preparation since the club advisers will give additional points.

1. **Moderator**
- The moderator is in charge of forming the expression and providing go-signals.
- The moderator must inform the timer and flag facilitator once the team's answer is formed.
- *Note: There should only be one (1) moderator for each section.*

2. **Timer and flag facilitator**
- The timer and flag facilitator is responsible for monitoring the time.
- *Note: The timer and flag facilitators will come from the JMC Officers.*

3. **Keys**
- The keys are used to form the expression for each question.
- Each grade level will have a different set of keys to be used, and the club advisers will provide it.
- The keys should wear costumes following their theme. Props for each key are allowed.
- *Note: There should be precisely twelve (12) keys for each section.*

- Each section is required to submit an initial list of the participants on **November 21, 2025 (Friday).**

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Note: Three (3) days will be allocated for each section to they are sure of the participants they listed. The class mayor can submit the said list via Google Form.

- The final list of the participants is required to be submitted on **November 23, 2025**. (Sunday)

  Note: The final list of participants can't be changed once submitted unless there is a valid reason for changing. Failure to submit the final list on the said deadline would result in inability to compete as a section.

- The list of heads for the preparation must be submitted on **January 31, 2026 via Google Docs** to give credit and the additional points that the club advisers will provide.

INITIAL LIST (PARTICIPANTS) : JMC INITIAL LIST OF PARTICIPANTS (Human Calculator)
FINAL LIST (PARTICIPANTS) : JMC OFFICIAL LIST OF PARTICIPANTS (Human Calculator)

III. THEME

The Junior Mathematics Club will facilitate the election of categories during the scheduled meeting.

Each section will first conduct an internal voting to decide on one category that best represents their class. The chosen category from each section will then be submitted and compiled during the meeting facilitated by the Junior Mathematics Club. All submitted categories will be placed in a Spin the Wheel, and the winning category from this draw will serve as the official category of the batch for the competition.

Once the final category has been determined, each section will be given the freedom to create their own specific theme, provided that it falls under the chosen category. This ensures that all sections have equal participation in the decision-making process while promoting fairness, creativity, and excitement in the competition.

Meeting Date: 3 days after the General Meeting of Clubs and Students

Note: Every section must prepare an **inspiration board** consisting of a **minimum of 4 printed A4 bond paper pictures**.

- These pictures should represent the **ideas and inspirations** behind the chosen theme and costumes.

- The printed pictures will be **collected by the JMC Officers before the event** and will serve as references for the **judges** when evaluating the outputs.

Note: the **keys** must be **included in the presentation**. either **attached** to the costume or **held by participants**, as long as they are consistent with the chosen theme.

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Note: Each section should input its theme in the Google Docs created by **October 25, 2025**. Failure to do so will result in *DISQUALIFICATION*.

Google Docs Link for the theme: List of Themes .docx

Note: The participants/keys are **not allowed to change/remove their costumes** until the awarding portion of the event in the afternoon.

IV. FINANCIAL REGULATIONS

1.1 Collection of Funds

- Each Class Treasurer and their assistant will collect PHP 30 (each student) from their respective sections for the Junior Math Club fees. The Class Auditor will keep a record to track all classmates who have paid.

1.2 Submission of Funds

- The collected money from the Class Treasurer and their assistant will ONLY be submitted by the Class President or Class Treasurer to **Lara Aldaba**, the Junior Math Club Treasurer. And Gabrielle Dela Cruz, the Junior Math Club Assistant Treasurer, on **November 17** to **November 20** during lunch and dismissal time.

Note: The list of those who have paid will also be submitted to the Treasurer of the Junior Math Club.

Note: All sections are required to submit on the assigned date and time. Sections that are unable to comply must contact the Junior Math Club Treasurer via Facebook Messenger: Lara Aldaba or Gabrielle Dela Cruz

1.3 Budget Limit

- Each section will be mandated to use only **₱2,000** for all the expenses to be used in the club event. Students are HIGHLY ENCOURAGED to use recycled materials for their props and costumes.

- Incentives from the club advisers will be given to those who will follow the budget limit.

- **Liquidation form with Official Receipts** must be submitted.

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Note: All sections are required to submit a liquidations form indicating all the expenses used in the event.

V. COMPETITION PROPER

The host will give an **answer,** and the challenge for each section is to **make an expression** that will result in the given answer said by the host. There are many ways to make an expression that will result in one answer so it is possible to come up with different kinds of expressions. The Club advisers are in charge of checking whether the expressions presented by each section are accepted. Each correct and accepted answer is equivalent to *one point*. The section who first reaches *Five (5) points* will be the champion for each grade level.

- Each given will only be repeated by the host **2 times**.
- A maximum time limit of **3 minutes** is allotted for each given. The host will proceed to the next given if none of the sections can form an expression after the given time.
- The go-signal for each participant to form their answer is when they hear the word **"*NOW*!"** from the host. The **timer and flag facilitator** must also begin the timer upon hearing the keyword. Once the team's expression is formed, the **moderator** should shout **"*CALCULATED*!"** so the timer facilitators will stop the timer and acknowledge their formed expression by *raising the flag,* indicating that the club advisers will check their answers. Once the flag is raised and the timer is off, a change of answer is strictly **prohibited**.
- The keys are allowed to help the moderator since this competition involves the developing of cooperation and teamwork values of the students.
- **During free time, the emcee will ask Math-related questions to the audience.**
- **Students from the audience who can successfully answer the questions will receive tokens/prizes prepared by the Junior Math Club (JMC).**

Note: Starting to form expressions without the go-signal of the host will result in the *DISQUALIFICATION* of the section for the **present round.**

Note: (Rule for stealing) Once the team gives a wrong answer for one round, they can no longer provide and formulate answers. The chance will be given to other teams until they get the correct answer. The host will proceed to the next given if none of the teams can develop an expression.

Note: Scratch papers are **not allowed.**

COVERED LESSONS AND ASSIGNED KEYS (for each grade level)

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SECTION/LESSON	*KEYS*
Grade 7 (Whole Numbers)	＋ － × ÷ 0 1 2 3 5 6 7 8
Grade 8 (Exponent)	^ ＋ － × ÷ 0 1 2 3 5 7 9
Grade 9 (Fraction)	$(,), +, -, \times, \div, 0, 3, 8, \frac{1}{2}, \frac{7}{6}, \frac{9}{4}$
Grade 10 (Trigonometry)	cos 60°, sec 60°, tan 45°, sin 45°, sec 45°, sin 90°, cos 0°, ÷, +, −, ^, ²

VI.

VII. AWARDS

CHAMPION *Each grade level*	- Medals (each participant) - Certificate
BEST CALCULATOR *Each grade level*	- Certificate
BEST COSTUME *Each grade level*	- Certificate

VIII. CRITERIA FOR JUDGING

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BEST CALCULATOR **This award highlights the creativity and craftsmanship behind the decorated calculator. Judges will evaluate how well the calculator was transformed into an expressive, themed, and visually appealing piece.**	**Creativity and Originality (40%)** ● The calculator/key's should demonstrate unique and imaginative design. ● Decorations or modifications must show innovation, resourcefulness, and creativity. ● Judges should look for designs that stand out from typical or plain calculators, with elements that clearly reflect the participant's originality. **Functionality and Usability (30%)** ● The calculator must remain functional and easy to use. ● Designs should not hinder the primary purpose of the calculator. ● **Keys must remain readable and accessible**, ensuring that users can still operate the calculator efficiently. ● Judges should check if the design balances creativity with practicality. **Craftsmanship and Neatness (20%)** ● Attention should be given to the overall finish of the calculator/keys. ● Designs should be neat, well-organized, and carefully executed. ● Judges should look for effort, precision, and durability of materials used. **Relevance to Theme or Event (10%)** ● The calculator's/key's design should connect with the theme of the event, if applicable. ● Judges should check for appropriateness, consistency, and meaningful representation.

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BEST COSTUME **This category focuses entirely on the outfit itself—its creativity, craftsmanship, and overall impact on stage. Judges must look closely at the costume as a complete work of art.**	**Creativity and Originality (35%)** ● Costumes must be unique, imaginative, and not a typical or overused design. ● Judges should look for elements that show innovation and creativity, such as unusual materials, inventive concepts, or unexpected twists in design. ● A truly original costume should immediately set the participant apart from others. **Visual Impact and Presentation (30%)** ● The costume should be visually striking and capable of catching the audience's and judges' attention at first glance. ● Consider the use of bold colors, coordinated patterns, balance of design, and how well the costume is carried by the wearer. ● Presentation includes neatness, how well the costume fits, and how confidently it is displayed. **Attention to Detail (15%)** ● Small details elevate the costume from ordinary to exceptional. ● This may include intricate accessories, realistic or creative makeup, carefully crafted props, or fabric/textile choices. ● Judges should look for effort and precision in these finishing touches. **Relevance to Theme or Character (20%)** ● The costume should connect with the given theme, or if based on a character, should clearly represent that figure. ● Judges should check for accuracy, consistency, and appropriateness to the context of the event.