



# Memorandum of Understanding for organizing a regional or national competition MATHFactor - MATHeatre

[www.le-math.eu](http://www.le-math.eu), [www.thalescyprus.com](http://www.thalescyprus.com), [www.cms.org.cy](http://www.cms.org.cy)

This Memorandum of Understanding (the "MoU") is hereby entered into between the  
Thales Foundation<sup>1</sup> ("International Le-MATH® Competitions Organizer")

and

\_\_\_\_\_  
with offices at (address) \_\_\_\_\_  
\_\_\_\_\_ (the "Local Organizer")

for the school year 2014-2015 at the  
(choose one)

city \_\_\_\_\_  
region \_\_\_\_\_  
country \_\_\_\_\_

on the following terms and conditions:

## CONTEXT

This Memorandum of Understanding (MoU) is based on the conditions of both the Guide to Le-MATH Guidelines and Competitions (MATHFactor® and MATHeatre®) international and THALES Foundation based on the cooperation between THALES Foundation and the Cyprus Mathematical Society through the exploitation plan agreement of the project Le-MATH.

## PURPOSE

The purpose of this MoU is to agree the delivery of MATHFactor® and/or MATHeatre® 2014-2015 school year in the city/region/country specified above .

## MATHFactor® and/or MATHeatre® 2014-2015 in the region stated above

The THALES Foundation of Cyprus and Local Organizer agree to run MATHFactor and/or MATHeatre. In all MATHFactor® and MATHeatre® activities the following must be adhered to:

## COMPETITION Timeframe

The local competition will run up until February 2015, so that winners of MATHFactor or MATHeatre 2014-2015 in the corresponding region will be established in time in order to be prepared for the International Final (April 2015).

## BRANDING

The local organizer agrees to the MATHFactor®, MATHeatre® and THALES Foundation branding conditions as detailed in the Memorandum of Understanding, including the use of up-to- date branding

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<sup>1</sup>The THALES Foundation of Cyprus, registered as a non-for-profit organization (Reg No HE143720)



and information on any external website created. It is agreed that, wherever possible, the involvement of the THALES Foundation and the Cyprus Mathematical Society will be equally highlighted in any kind of publicity.

Logos and text to be used appears in Annex 1 below.

### **Quality Assurance**

The Local Organizer agrees to run MATHFactor and/or MATHeatre in its region under the quality assurance of the Le-MATH guidelines. These guidelines are contained in the Guidebook of the Le-MATH project ([www.le-math.eu](http://www.le-math.eu)), which includes how to run MATHFactor and/or MATHeatre competitions as well as reporting and evaluation guidelines.

### **INNOVATIONS AND VARIATIONS**

Any innovations or variations from the prescribed MATHFactor and MATHeatre international format will be discussed and approved by the THALES Foundation prior to implementation. The use of the MATHFactor and MATHeatre brand and timeline of new innovation or variation will be defined by representatives of THALES Foundation and the Cyprus Mathematical Society to the best implementation of the new innovation or variation.

### **GOVERNANCE**

Annual meetings of the Local Organizers, within EUROMATH conference, where the International Finals of MATHFactor and MATHeatre will be taking place, will be arranged to ensure the maintenance of the MATHFactor and MATHeatre expanding momentum, planning issues and the competition's International integrity.

### **TERMINATION OF MOU**

On any breach of MoU, the THALES or Local Organizer reserve the right to terminate the MoU agreement with immediate effect. Following this, the Local Organizer will cease to use any part of MATHFactor and MATHeatre branding or the competitions format in any form. The MoU may also be terminated by mutual agreement between the parties.

### **TIMEFRAME OF MOU**

This MoU will remain active until July 2015, unless terminated, and will then automatically renewed for a further year, on so on for future years, unless there is a notice, from either party, of at least 3 months and not less than 6 months before the start of any planned activity).

### **FINALISTS and FUNDING**

The Local winner (city, region, national) as announced by the Local Organizer will automatically be listed in the list of finalists for the international competition. Only one winner per country will be accepted in the list of finalists, whether the local competition is organized at city or region or national level.

The International organizer, the THALES Foundation, will offer shared accommodation and food to the finalists for 2 days. Additional days and travel expenses will be covered by the finalists or their sponsors.

### **REPORTING**

The Local Organizer agrees to send once per year and after the completion of the Local competition a report to the THALES, indicating the number of participants per competition, feedback from pupils,

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teachers and parents, related photos of the events, copies of promotional material used, diplomas given and gifts to the winners and a list of participants with contacts. This report should be sent before the competition of the school year and before the automatic renewal of the agreement is in effect.

The THALES Foundation will not hold any responsibility for any misuse of its branding by the Local Organizer.

This agreement will be governed by and construed in accordance with the laws of the Republic of Cyprus and the parties hereby submit to the exclusive jurisdiction of the Cyprus courts.

This MoU agreement, and annex document, will be signed and dated by the Local Organizer and the THALES Foundation prior to the commencement of the competition. Signed agreements will be kept by both Local Organizer and the THALES Foundation.

The Local Organizer will not, assign or transfer, or cause to be assigned or transferred, this MoU or any part, share or interest therein to any third party, without the prior written agreement of the THALES Foundation.

The contact person for the Local Organizer is

Surname \_\_\_\_\_  
Name \_\_\_\_\_  
Gender \_\_\_\_\_  
Email \_\_\_\_\_  
Tel ( ) \_\_\_\_\_  
Mob ( ) \_\_\_\_\_  
Fax ( ) \_\_\_\_\_

IN WITNESS WHEREOF, for adequate consideration and intending to be legally bound, the parties hereto have caused this Memorandum of Understanding to be executed by their duly authorized representatives.

\_\_\_\_\_ Local Organizer (Print)

\_\_\_\_\_ Name of signee

\_\_\_\_\_ (Signature)

\_\_\_\_\_ THALES Foundation Official Representative

\_\_\_\_\_ Name of signee

\_\_\_\_\_ (Signature and Stamp)

Date: \_\_\_\_\_

*(signed in two original copies)*

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## ANNEX 1

**1. Official Logos** to be used (after submission of signed MoU the logos will be sent by email if different formats)



## 2. Text to appear in all related publications, printed and electronic

The MATHFactor® (country/region name/city) (example MATHFactor Hungary or MATHFactor Sofia) and in similar format for MATHeatre® (country/region name/city) is organized under permission of MATHFactor® and/or MATHeatre® International Competition signed with the THALES Foundation under permission of the Le-MATH project, funded by the European Commission.

## 3. Link of website of the Local Organizer to

[www.le-math.eu](http://www.le-math.eu)  
[www.thalescyprus.com](http://www.thalescyprus.com)  
[www.cms.org.cy](http://www.cms.org.cy)

## 4. Evaluation templates

### **4.1 Assessment criteria for MATHFactor**

The Assessment factors are those suggested for the competition but they can be used by teachers by adapting them to their own environment.

The assessment concerns:		Qualitative levels			SCORE (Factor)
		Lower 5-6 points	Intermediate 7-8 points	Higher 9-10 points	
<b>1</b>	<b>CONTENT</b>				X
	The degree to which the student demonstrates understanding of mathematical concepts and relationships between these	Displays basic knowledge	Displays good knowledge	Displays excellent knowledge	

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	The quality of the student's analysis, conclusions and reflections, as well as other forms of mathematical reasoning	Uses some substantiated reasoning to make the mathematics understanding easy	Uses acceptable mathematical reasoning to make mathematics understanding quite easy	Uses excellent mathematical reasoning to make mathematics understanding very easy and almost obvious	
<b>2</b>	<b>CLARITY</b>				<b>Y</b>
	The quality of the communication. How well the student uses mathematical expressions (language and representation)	Expresses him-/herself simply, but understandably, using a mathematical language and approach suitable for the topic and non-expert audience	Expresses him-/herself clearly using a mathematical language and approach suitable for the topic and non-expert audience	Expresses him-/herself very clearly and confidently using a mathematical language suitable for the topic and non-expert audience	
<b>3</b>	<b>CHARISMA</b>				<b>Z</b>
		Displays some adaptation to the audience, e.g. by looking up, speaking clearly and/or showing commitment.	Displays relatively good adaptation to the audience by looking up, speaking clearly and presenting facts in an interesting or engaging way. Presentation and body language that causes impression to the audience.	Displays good adaptation to the audience by looking up, speaking clearly and presenting facts in an interesting and engaging way. Presentation and body language that causes impression and excitement to the audience	
<b>TOTAL X·Y·Z</b>					
<b>CHARISMA further analysis discussion</b>					
<ul style="list-style-type: none"> <li>• 1924 Max Weber defined Charisma (English translation from Wikipedia): "Charisma is a certain quality of an individual personality by virtue of which he is set apart from ordinary men and treated as endowed with supernatural, superhuman, or at least specifically exceptional powers or qualities. These are such as are not accessible to the ordinary person, but are regarded as of divine origin or as exemplary, and on the basis of them the individual concerned is treated as a leader."</li> <li>• To be truly charismatic, you need to be able to not only impress and charm a group of people, but you should be a person who is good at engaging others and always have something interesting to say, so people will naturally listen to you. Charisma is something you do to cause impression and</li> </ul>					

	<p>excitement to the person aching.</p> <p>Charisma is not the same thing as confidence, but appearing confident can make the student more charismatic because his/her confidence will put others at ease and inspire faith in the speakers' abilities. Is the student speaking with confidence and at ease? When saying something important you need to say it with conviction. This is acquired by speaking clearly with a relaxed pace. To keep the speech interesting and emphasize the most important words the student needs to vary tone of voice, rhythm, volume and pitch.</p> <p>By using body language well the student becomes an effective and charismatic communicator who appears trustworthy and competent.</p> <p>Also by using the body language the students show that they are engaged and committed. The posture should be tall and straight, with uncrossed arms and hands away from face. If you are passionate about something your gestures communicate this, and you use gestures in order to emphasize and explain the content of the speech.</p> <p>Another important aspect for good contact with the audience is eye contact. The student should look the audience in the eye and engage them with eyes not only voice.</p> <ul style="list-style-type: none"> <li>• Use intuition and if what you see impresses you as a performance of above standard and special and unexpected then what you see is charisma. Some of us may see charisma and some of us may not. When we see it, we want to assess highly, when we do not we give a lower mark.</li> </ul>	
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## 4.2 Assessment Criteria for MATHeatre

### I – Mathematical content

- The students have approached a mathematical concept studied in class
- The students were able to clearly stage the concept
- The student have used a theoretical concept and made it comprehensible

### II – Theatrical aspect

- The students feel at ease/confident in front of their classmates and express themselves appropriately
- The students use the space well
- The students have respected the given instructions.

### III – Creativity of the staging

- The students show originality in their performance
- The students demonstrate originality in their stage set-up (e.g. decoration, music, projections, etc, ...)

The criteria above can be used according to the education system of each country or school.

The assessment concerns:	Qualitative levels	
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		Lower 5-6	Intermediate 7-8	Higher 9-10	SCORE (Factor)
<b>1</b>	<b>Mathematical content</b>				X
	Relevance of concept(s) discussed				
	Ability to make a mathematical theory comprehensible				
	Approach used to explain theoretical elements				
<b>2</b>	<b>Theatrical aspect</b>				Y
	Quality of expression: <ul style="list-style-type: none"> <li>• Delivery: speed of the speech (slow or fast)</li> <li>• Volume: speech is loud enough to be understood.</li> <li>• Articulation: clear pronunciation</li> <li>• Vocabulary : richness of the vocabulary used</li> </ul>				
	Space management and interaction				
	Respect of instructions : <ul style="list-style-type: none"> <li>• length: 5 minutes to prepare the stage,</li> <li>• 5-12 minutes to play</li> </ul>				
<b>3</b>	<b>Creativity of the staging</b>				Z
	Originality of the appearance and use of costumes				
	Use of the electronic back screen of the stage: originality of the projection on the screen and harmony with the play				
	Originality and appropriate use of sound effects and music, if needed				
				<b>TOTAL X· Y· Z</b>	