

**Petr Beremlijski, Petra Vondráková, Robert Mařík**

Department of Applied Mathematics, VSB – Technical University of Ostrava (CZECH REPUBLIC)

The educational software Math for Student (MATH4S), the educational application Math for Teacher (MATH4T), and the educational library Math for Class (MATH4C) are three basic sections on the new educational portal Math Exercises for You (MATH4U) – math4u.vsb.cz.

The portal Math4U offers secondary school teachers and students attractive and unconventional training materials including a vast number of multiple-choice questions and math games. The purpose of Math4U is to enhance skills in math, refresh the teaching and learning process, and increase interest in math.

### MATH FOR STUDENT – PRACTICE TO ACHIEVE MASTERY

#### Unique educational software for practicing all topics of secondary school mathematics

Set up an on-line test on any topic of the secondary school math curriculum.

- You can practice whenever and wherever you want - with a computer, tablet or smartphone.
- You can choose a topic, a number of problems and then you can begin. An interactive HTML test based on your preferences will be generated.
- You can choose either a summary test comprising all types of questions in the topic or a customized test. In the customized test you can choose the number of questions from various subtopics and levels.
- You can see the evaluation of your answer immediately after answering a question.

The application works with a database of over 4000 multiple-choice questions each of which are in four different languages (English, Czech, Polish, and Slovak).



### BENEFITS FOR STUDENTS AND TEACHERS

- The application covers the whole mathematical curriculum at secondary schools which is divided into 12 topics and 56 subtopics.
- Math4S uses a vast database of multiple-choice questions in four languages (16,000 in total).
- The questions are accompanied by appropriate figures with the goal to strengthen the understanding of the geometric meanings of the topics studied.
- High typographic quality has been achieved by using LaTeX math encoding.
- After passing a test, the students receive immediate feedback (their score, their success ratio, correct answers).
- Each mathematical formulation has been checked by three mathematic professionals to provide a database with an exceptionally high quality.
- The application is free for everyone.

### ABOUT THE PROJECT

The portal math4u.vsb.cz was created as a part of the Math Exercises for You (2016-2019) project supported by Erasmus+ Programme.

#### PROJECT COORDINATOR

Department of Applied Mathematics, VSB - Technical University of Ostrava (Czechia), am.vsb.cz

#### PARTNERS

Grammar School, Ostrava-Hrabůvka (Czechia), www.ghrabuvka.cz

Grammar School of Otto Wichterle (Czechia), wigym.cz

The association of schools in Lipnica Wielka (Poland), lic-tech.lipnicaszkoły.pl

Grammar School, Varšavská cesta, Žilina (Slovakia), www.gvarza.edu.sk

Grammar School of Anton Bernolák, Námestovo (Slovakia), www.gabnam.sk

