

Visual Mathematics in Practice



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| Name of the teacher: | Mileva Jelić |
| Name and address of the school: | SSŠ „Dr Radivoj Uvalić” 23 Trg bratstva i jedinstva Street, Bačka Palanka, |
| Theme of the lesson: | Area figures in the plane |
| Place in curriculum: (type of school, grade) | Secondary Economic school, 2nd grade |
| Age of the students/pupils: | 16 years |
| Title of the lesson: | <i>Area of a complex figure</i> |

| Description of the lesson | | | |
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| Time | Exercises, matters, parts of the lesson | Methods and forms of student activities | Developable competencies |
| 5 mins | <i>Repeat the previous knowledge about the equilateral triangle and square. What is the square? What is the equilateral triangle? How many edges, vertices, what is the measure of its interior angles, what is the scope, what is the area?</i> | <i>Group discussion. The method of questions and answers.</i> | |
| 30 mins | <i>Pupils are divided into groups of 4-5. Each group gets a set of tangram pieces. Groups are tasked to connect a certain figure (fish, swan boat, dancers, duck or house). After that, all groups have the same task, using all parts of Tangram to compile square, rectangle, trapezoid, parallelogram and triangle.</i> | <i>Group work.</i> | <i>Skills and abilities developed through the game.</i> |
| 10 mins | <i>Do all figures have the same area and what is it? What the easiest way to calculate the area of a figure that we have compiled? What is the area of individual tangram puzzle pieces in relation to the whole puzzle? How to</i> | <i>Discussion. The method of questions and answers.</i> | <i>Analysis Sistematization</i> |

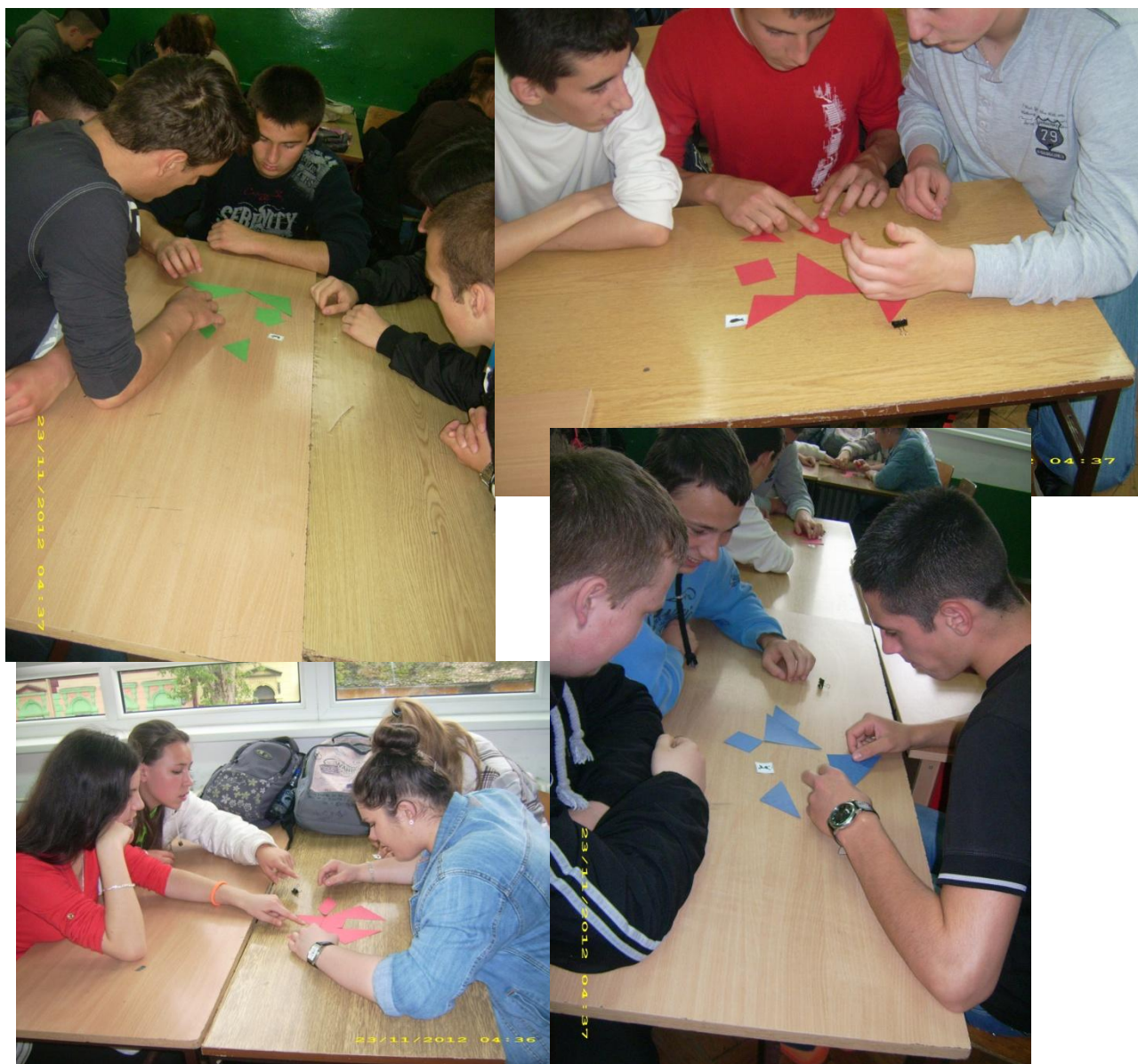
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| | <i>calculate the area of a complex figure? Can the surface be calculated only by "chopping and rearranging" or is there another way? What is the other way?</i> | | |
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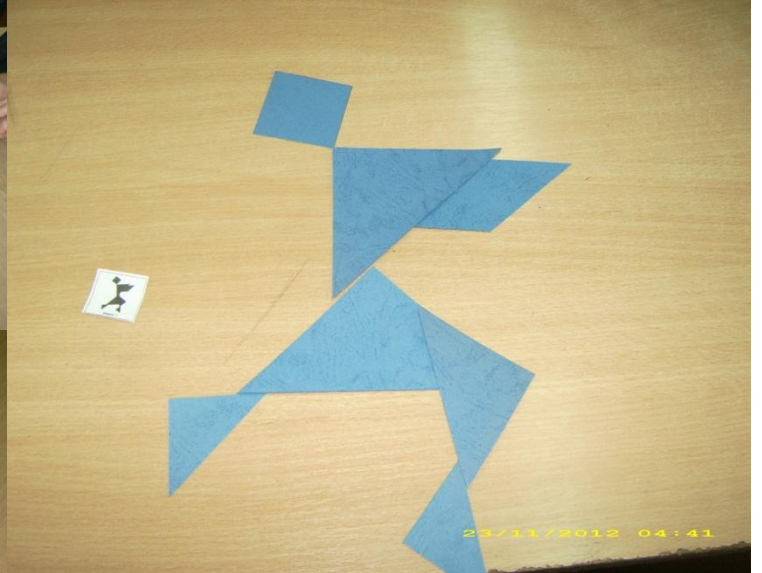
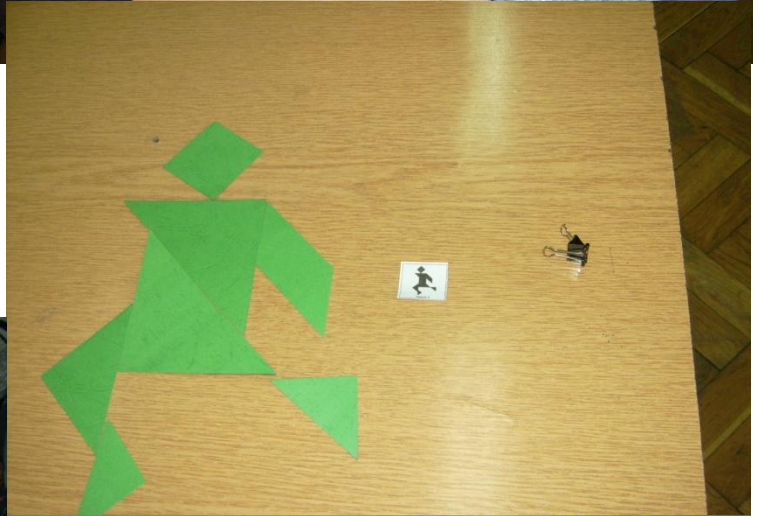
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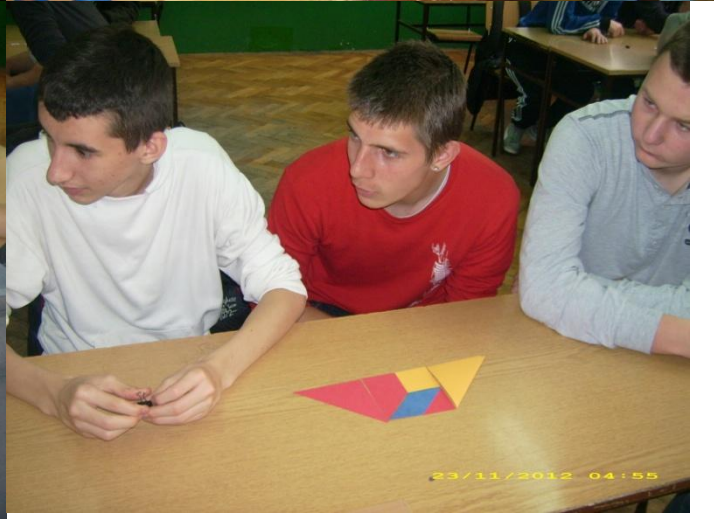
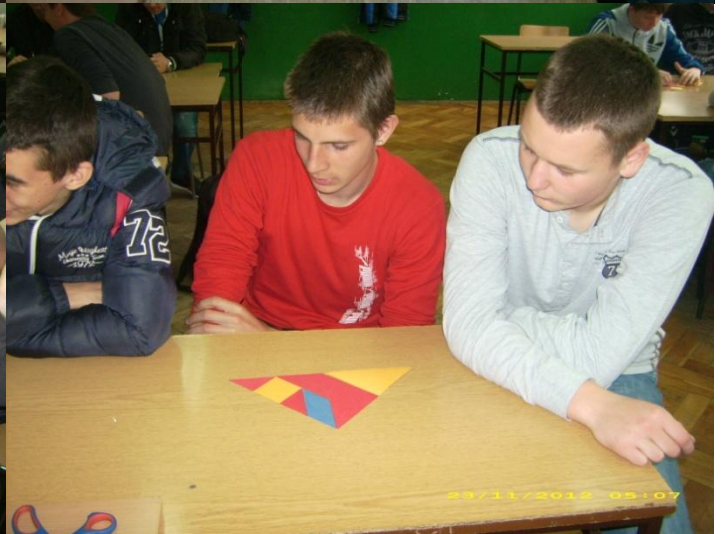
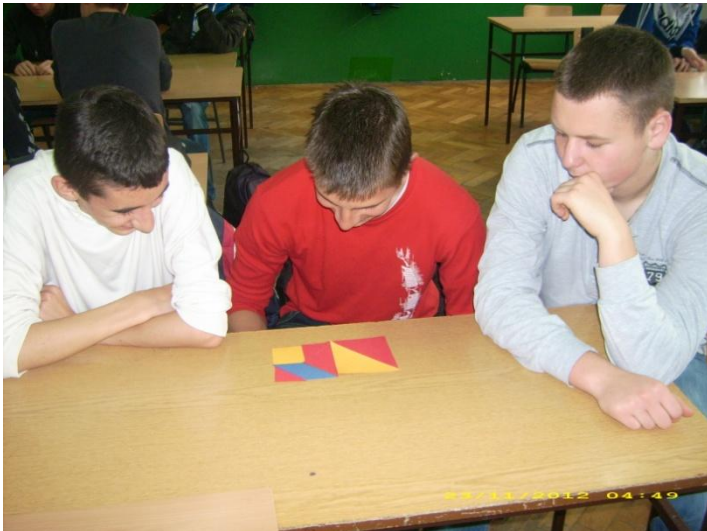
This lesson was held in the class of cooks. These students have difficulties following the curriculum contents, but they prefer this kind of work. All students participated in solving the tasks and competed to solve the task first.

Supplements

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| Used materials: | <i>Tangram puzzle</i> |
| | <i>Inspiration came from Ilona Téglási workshop on Summer School</i> |
| Photos: | |









This group found that by moving only one piece of puzzle from rectangle they can get the parallelogram or trapezoid. ☺

