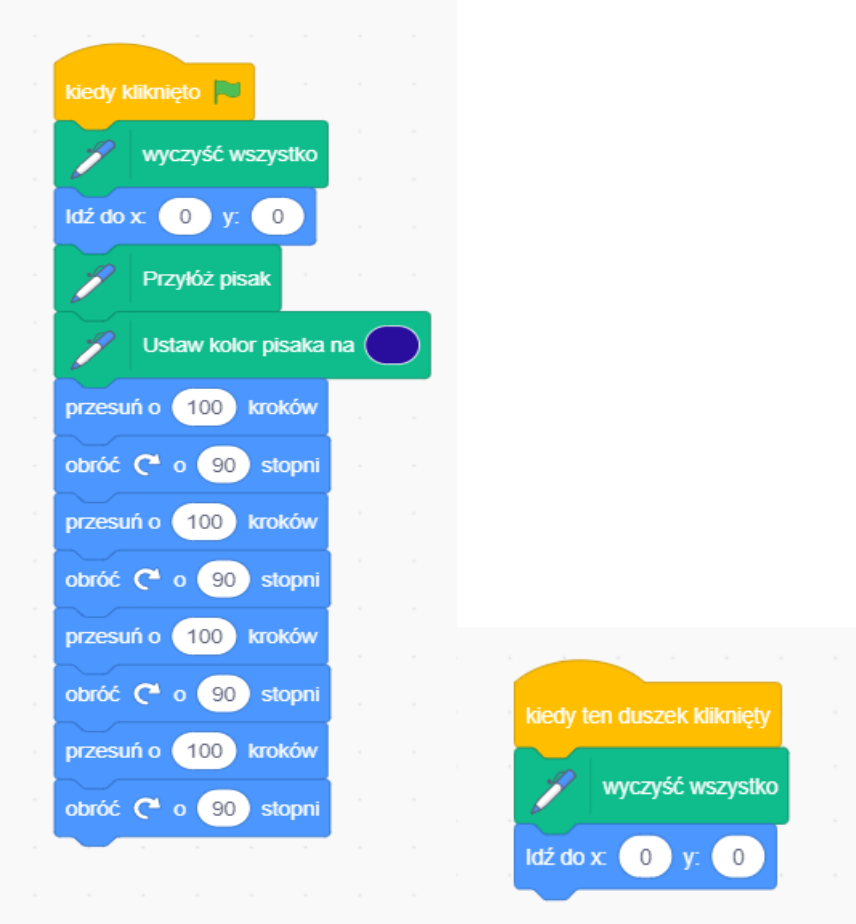
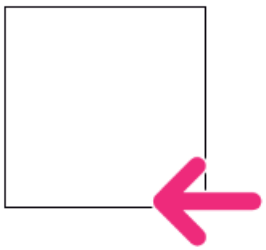
SCENARIO		
Title	Square rectangle.	
Summary	The student will remind the shapes of rectangles and square. He will learn the properties of these figures. He learns to draw figures of given lengths.	
Author/s	Renata Jasińska, Alicja Radziwon	Date: 02/12/2019

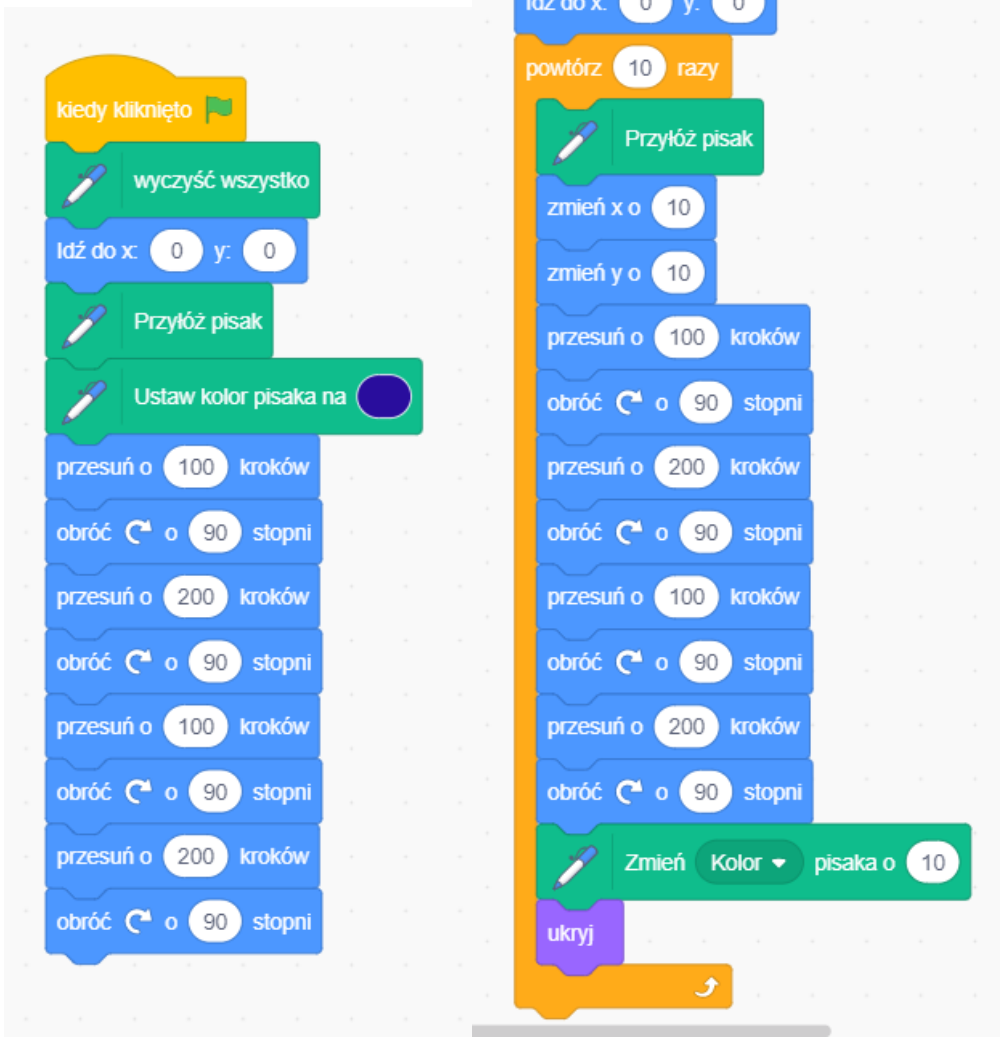
Didactic objectives
Lesson objectives Pupil: describes the rectangle, including the square; draws the diagonals of a rectangle; draws and recognizes rectangles in drawings; draws a rectangle with a ruler, set square and compass when it has the given length of two adjacent sides; draws a square with a ruler, set square and compass when it has a given diagonal of this figure; lists the properties of the diagonals of a rectangle; solves tasks using the properties of a rectangle.
Physics☐ Mathematics☒ Information☐ Technology☐ Robotics☐ Programming☐
Education Level: 10-12years☒ 12-14years☐
Problem Statement
What is the difference between a square and a rectangle? How to use instruments for drawing figures? How to use the properties of these figures when drawing them?
BOM (Bill Of Materials needed)
Computer workstations, scratch software
Activity description
1. Organizational activities 2. Reminder of rectangle and square shapes 3. exercises in drawing rectangles. 4. Exercises in drawing squares. Drawing a rectangle can be practiced first on a clean sheet without grids, and then on a grid sheet, but not on existing lines. In turn, drawing a square, when its diagonals are given, you need to practice on a checkered piece of paper - this is a very important skill ... 5. Exercises in drawing a diamond with diagonals. 6. Folding rectangular pages for testing, the properties of the rectangle, for example, put the short side of the rectangle to the long side and show how you can create a square from the rectangle. You can then cut the unnecessary piece of paper and bend the rest to properly test the properties of the square.

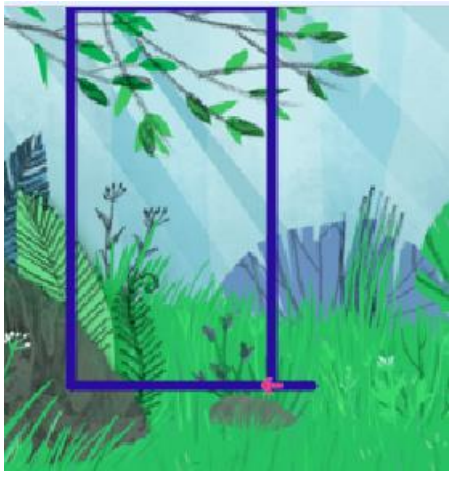
7. Sticking the completed figures to the notebook, describing their properties, marking the appropriate parts with color.
8. Work with the scratch program - (developing a list of steps to draw a square and drawing it on the board
Joint preparation of the list of steps to draw a rectangle
Work in the scratch program - drawing rectangles with different side lengths and squares with different side lengths)
Summary
Script for a square





Rectangle script


kiedy kliknięto
wyczyść wszystko
Idź do x: 0 y: 0
Przyłóż pisak
Ustaw kolor pisaka na
przesuń o 100 kroków
obróć o 90 stopni
przesuń o 200 kroków
obróć o 90 stopni
przesuń o 100 kroków
obróć o 90 stopni
przesuń o 200 kroków
obróć o 90 stopni
kiedy kliknięto
wyczyść wszystko
Ustaw kolor pisaka na
Idź do x: 0 y: 0
powtórz 10 razy
Przyłóż pisak
zmień x o 10
zmień y o 10
przesuń o 100 kroków
obróć o 90 stopni
przesuń o 200 kroków
obróć o 90 stopni
przesuń o 100 kroków
obróć o 90 stopni
przesuń o 200 kroków
obróć o 90 stopni
Zmień Kolor pisaka o 10
ukryj



Resources
Rectangular sheets of paper, pencils, rulers with figures.
Students' Evaluation
Fit on the planned stage, special effects. Involvement. Student activity
Bibliography
Available mathematics school textbooks, workbooks, task sets. Just those with whom the class works
Scalability
We can program so that stairs and spirals are created.
More information
We can program so that stairs, spirals from sections of a certain length or from a specified number of sections are created.