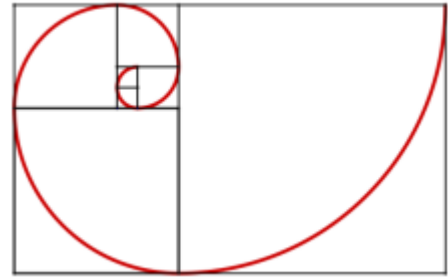


## Div 2 – Elective GeoGebra

### Creating a Fibonacci Spiral






A Fibonacci spiral can be created by drawing arcs connecting the opposite corners of squares in the Fibonacci tiling which uses squares of sizes 1, 1, 2, 3, 5, 8, 13, 21,...



### Preparations

- Show the grid

### Instructions

1		Use your Square tool to create a square with side length 1 <u>Hint:</u> Place the two points on grid points that are next to each other.
2		Create a second square with side length 1 below the first square. <u>Hint:</u> Use already existing points to connect both squares.
3		Create a third square with side length 2 on the right hand side of the two smaller squares.
4		Continue creating squares with side lengths 3, 5, 8, and 13 in counter clockwise direction.
5		Create a circular arc within the first square you created. <u>Hint:</u> Specify the lower right vertex of the square as the center of the arc. Select two opposite vertices of the square in counter clockwise orientation.
6		Repeat step 5 for each of the squares in order to construct the Fibonacci spiral.
7		Enhance your construction using the <i>Properties dialog</i> .