












## Creating a Square Tool

### Preparations

- Open a new GeoGebra classic
- Hide the algebra window, input field, and coordinate axes
- Change the labeling setting to All new objects

### Step by step

1		Segment $a$ with endpoints $AB$
2		Perpendicular line $b$ to segment $AB$ through point $B$
3		Circle $c$ with center $B$ through point $A$
4		Intersect circle $c$ and perpendicular line $b$ to get intersection point $C$
5		Parallel line $d$ to perpendicular line $b$ through point $A$
6		Parallel line $e$ to segment $a$ through point $C$
7		Intersect lines $d$ and $e$ to get intersection point $D$
8		Square $ABCD$
9		Hide auxiliary objects (lines and circle).
10		Hide labels of all objects.
11		Set the square's color to black and set the filling to 0%.
12		Create your square tool (menu <i>Tools – Create new tool...</i> ). <u>Output objects</u> : square, sides of the square, points $C$ and $D$ <u>Input objects</u> : points $A$ and $B$ <u>Name</u> : Square <u>Toolbar help</u> : Click on two points
13		Save your square tool as file <i>Square_Tool.ggt</i> <u>Hint</u> : Menu <i>Tools – Manage tools... – Save as...</i>

adapted from:

[https://www3.risc.jku.at/conferences/cadgme2009/Judith\\_Hohenwarter/presentation\\_files/GeoGebra\\_WS\\_7.pdf](https://www3.risc.jku.at/conferences/cadgme2009/Judith_Hohenwarter/presentation_files/GeoGebra_WS_7.pdf)