






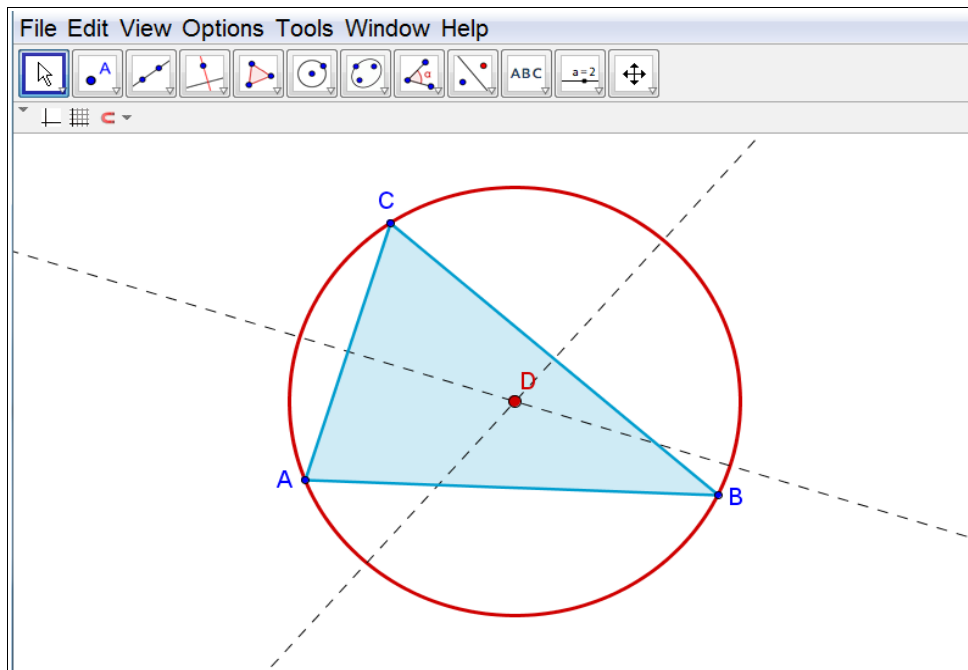
# GeoGebra

## Worksheet 1

Construct the circumcircle of a triangle by following the construction steps below.  
Explore the construction.

Instructions:

-  Select tool *Polygon*. Create an arbitrary triangle  $ABC$  by clicking three times in the *Graphics View*. Close the triangle by selecting the first point  $A$  again.  
Activate tool *Perpendicular Bisector*. Construct the *Perpendicular Bisector* for two of the edges of the triangle by successively selecting the segments.
-  Hint: You can find this tool in the *Special Lines Toolbox* (fourth *Toolbox* from the left).
-  Create intersection point  $D$  of the two the line bisectors.  
Hint: Successively select the two line bisectors, or click directly on the intersection point.
-  Construct a circle with center  $D$  through one of the vertices of triangle  $ABC$ .  
Hint: First, select point  $D$ , then, for example, point  $A$ .
-  Select the *Move* tool and drag the vertices of the triangle in order to check if your construction is correct.










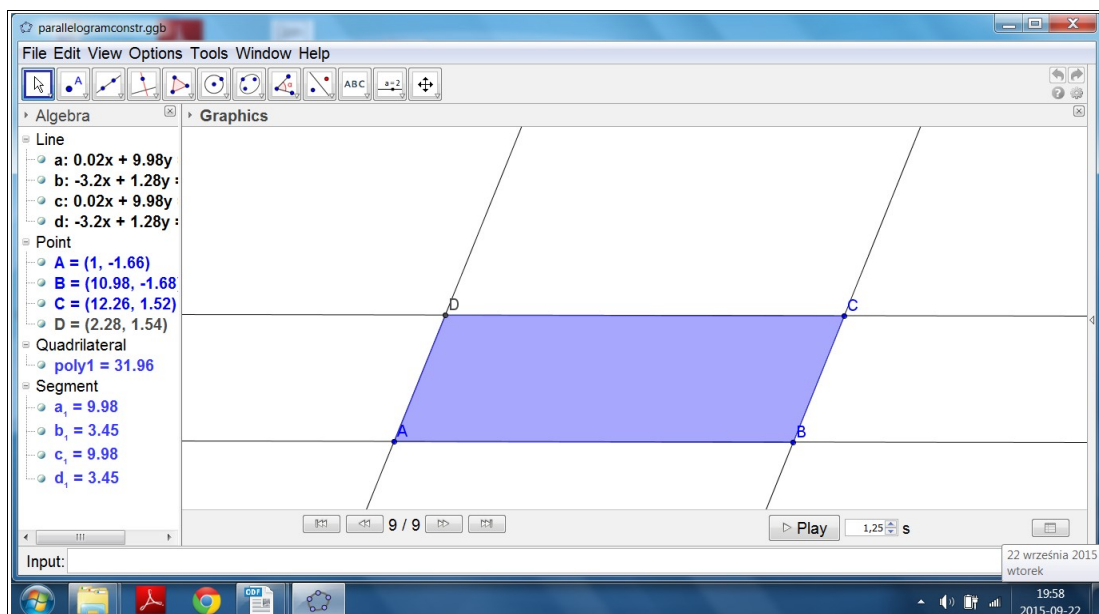
## Worksheet 2

Construct a parallelogram by following the construction steps provided below.

Explore the construction.

Instructions:

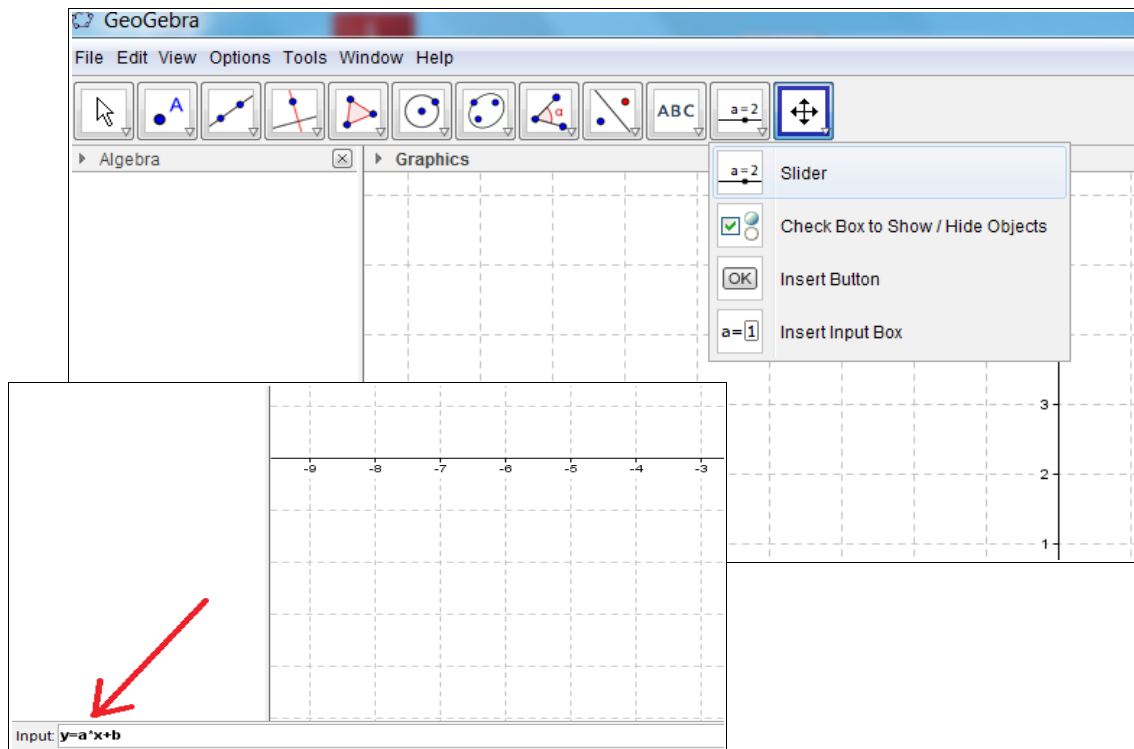
-  Select the *Line* tool and create an arbitrary line  $AB$  by clicking twice in the *Graphics View*.
-  Create a line  $BC$ .  
Hint: Select point  $B$  and then click in the *Graphics View* in order to create point  $C$ .
-  Activate the *Parallel Line* tool and create a parallel line to line  $AB$  through point  $C$ .  
Hint: Select the line  $AB$  and then point  $C$ .
-  Create a parallel line to line  $BC$  through point  $A$ .
-  Select the *Intersect* tool and create the intersection point  $D$  of the two lines.  
Hint: Click directly on the intersection point.
-  Activate the *Polygon* tool and create the parallelogram  $ABCD$  by successively selecting all the vertices.  
Note: In order to close your polygon, select the first point again.
-  Select the *Move* tool and drag the vertices of the parallelogram to check if it was constructed correctly.

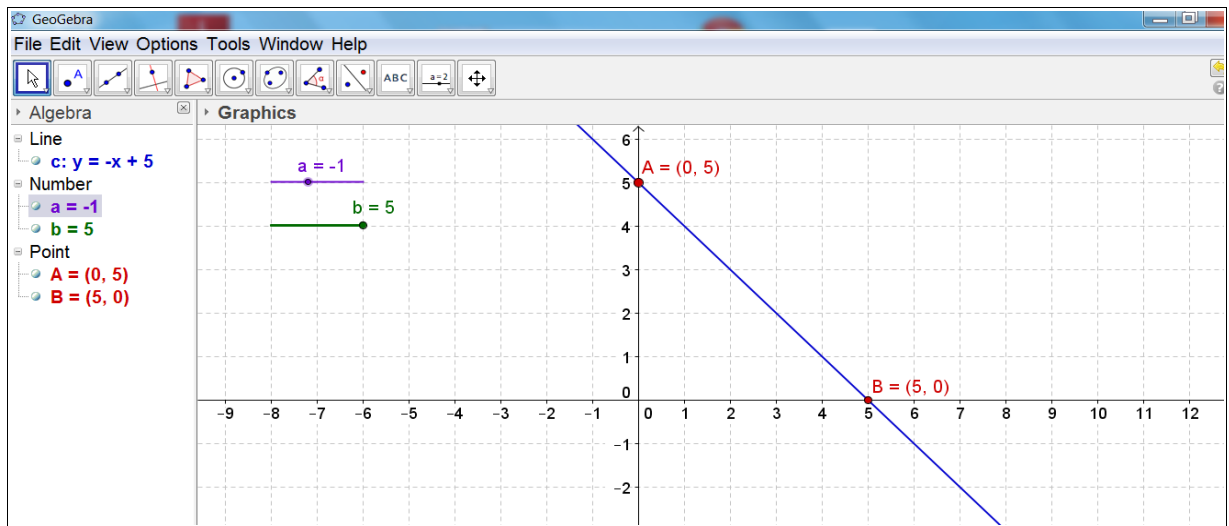


### Worksheet 3

#### Graph Animation

1. Select Slider a ( min: -5, max: 5, increment 1)
2. Select Slider b ( min: -5, max: 5, increment 1)
3. Input function:  $f(x)=a*x+b$





## Worksheet 4

Point moving on a circle

1. Draw circle
2. Select point C on the circle
3. Insert Button : Caption: Animate, Geogebra Script: StartAnimation[C] and apply
4. Insert Button : Caption: Stop, Geogebra Script: StartAnimation[False] and apply

