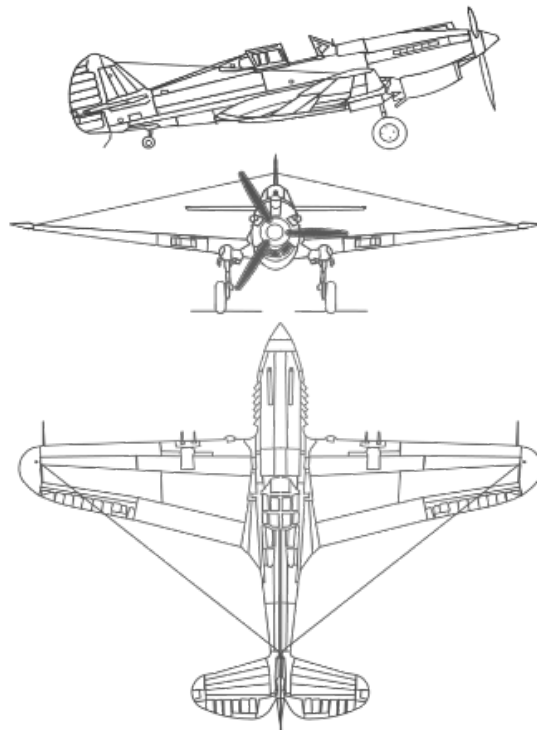

Sketch Box

User Manual

v 2.0.0



Introduction 4

Main Concepts.....4

Project Management.....5

Project View.....5

New project Menu 6

New Project From Style Template 7

New Project From Gallery.....9

New Project From Google Maps 10

Project context menu. 11

Main Concepts 12

Simple mode. 13

Extended Mode.....14

Manual position input. 16

Continuous mode.....17

User Interface.....22

File Menu.....23

Line Size Menu.....24

Text Menu.....25

Line Colour Menu 26

Fill Colour Menu.....27

Shapes Menu	28
Dimensions Menu	36
Map tools Menu	39
Line Style Menu	42
Tools Menu.....	43
Brush Menu.....	44

Status Bar 45

Tools.....46

Flood Fill/Hatch.....	46
Grid.....	47
Drawing Scale.....	49
Selection (Copy tool).....	50
Rotation.....	58
Layers	60
View Scale.....	62
Text.....	63
Custom Color.....	65

Introduction

Main Concepts

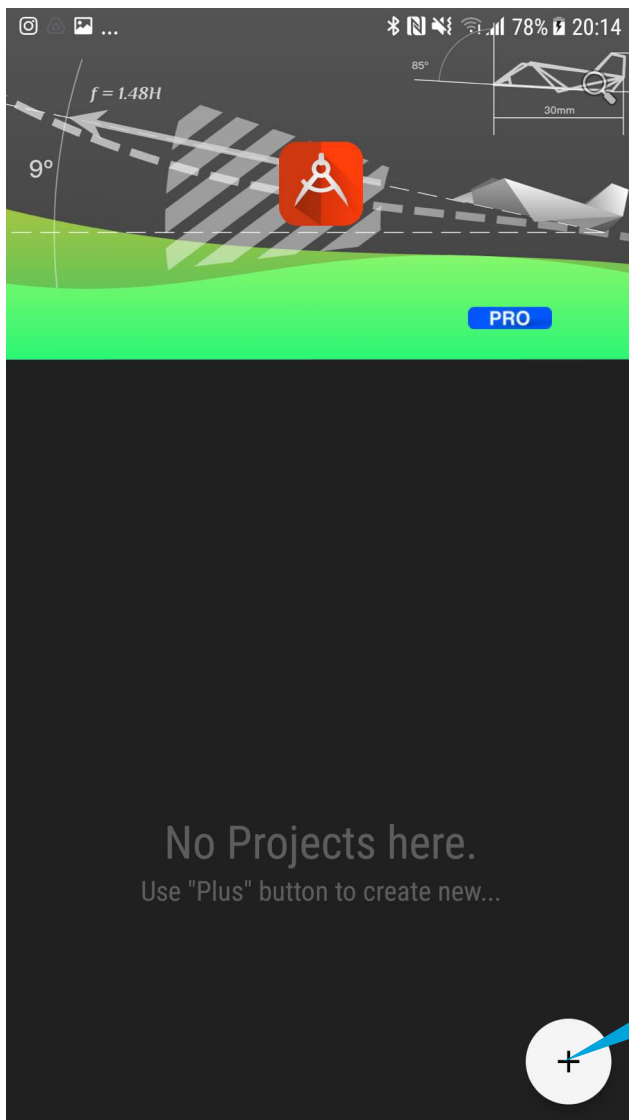
Available on market tools for drawing are oriented either for traditional (general drawing) either for technical drawing. Last automatically means that tool expected to be a vector graphic tool. As alternative to this, Sketch Box provides smooth combination of two mentioned approaches, powered by traditional drawing tools and by futures of CAD systems.

- not vector app
 - save as you go
 - not limited undo/redo, even after reopen project
 - project based
 - Google Maps support
 - Ad free
-

Project Management

Sketch Box is project based application, you can save you work in separated project, duplicate, share, delete, export and import it.

Project View

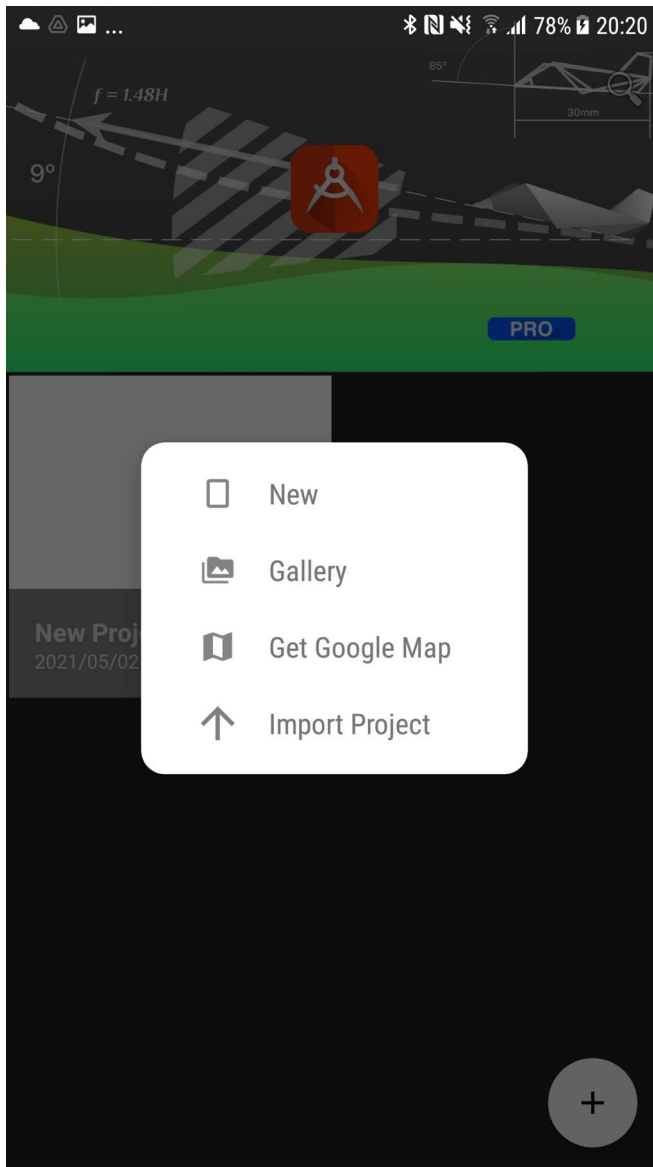


here is how main window looks like when you open app first time.

Create
Project

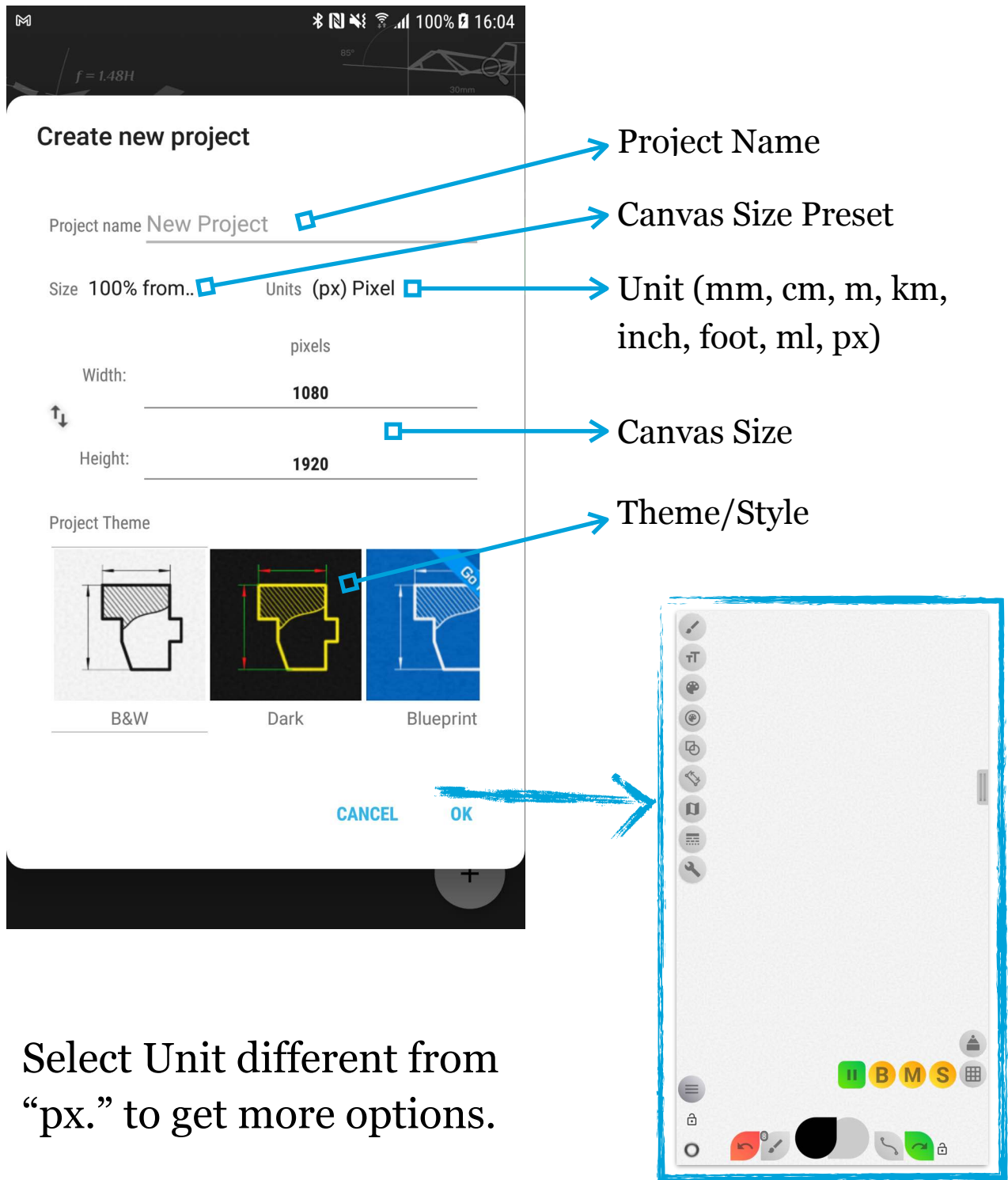
New project Menu

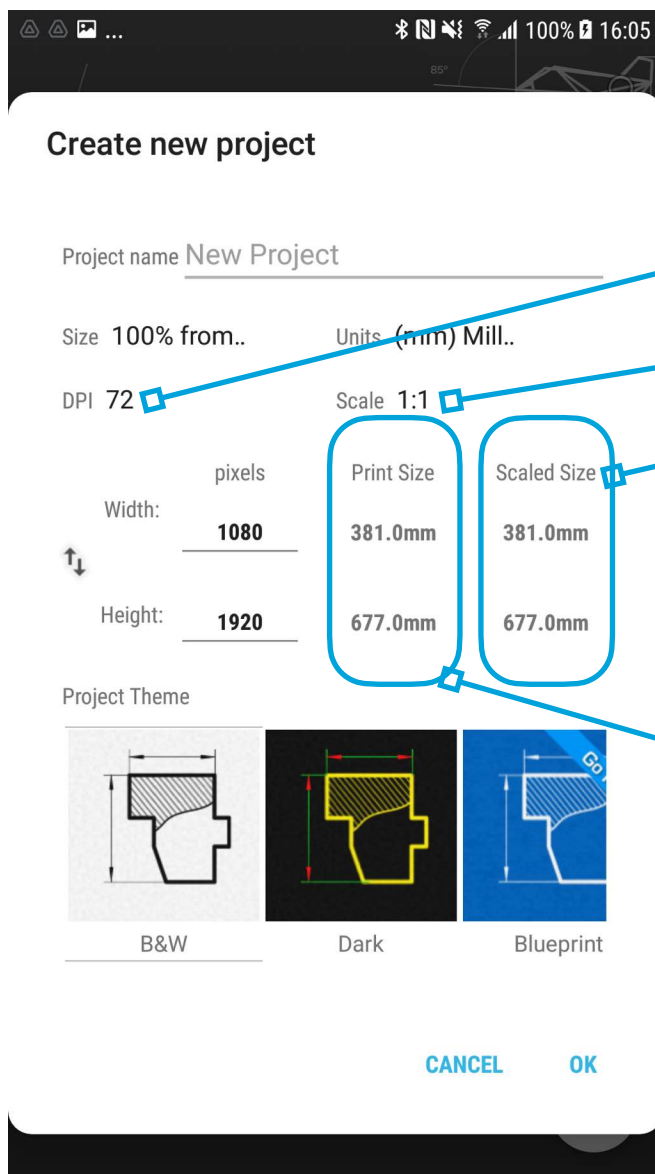
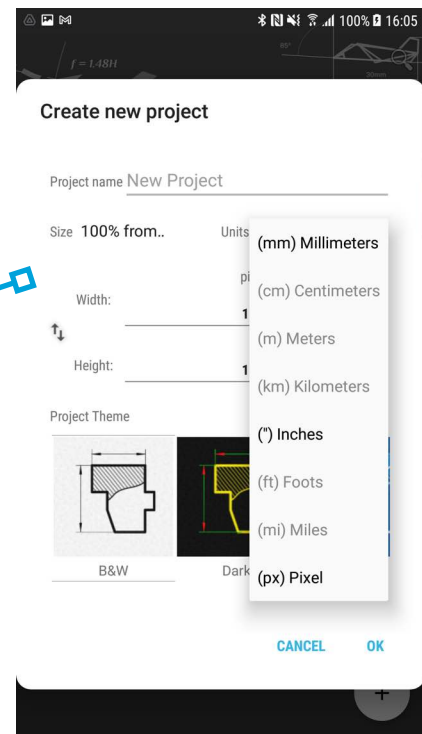
Sketch Box allow you to create project from 4 main sources



- *New* - create empty project from style template
- *Gallery* - create new project from Device Gallery picture.
- *Get Google Map* - create new project from Google Maps view.
- *Import Project* - import from file on your device

New Project From Style Template





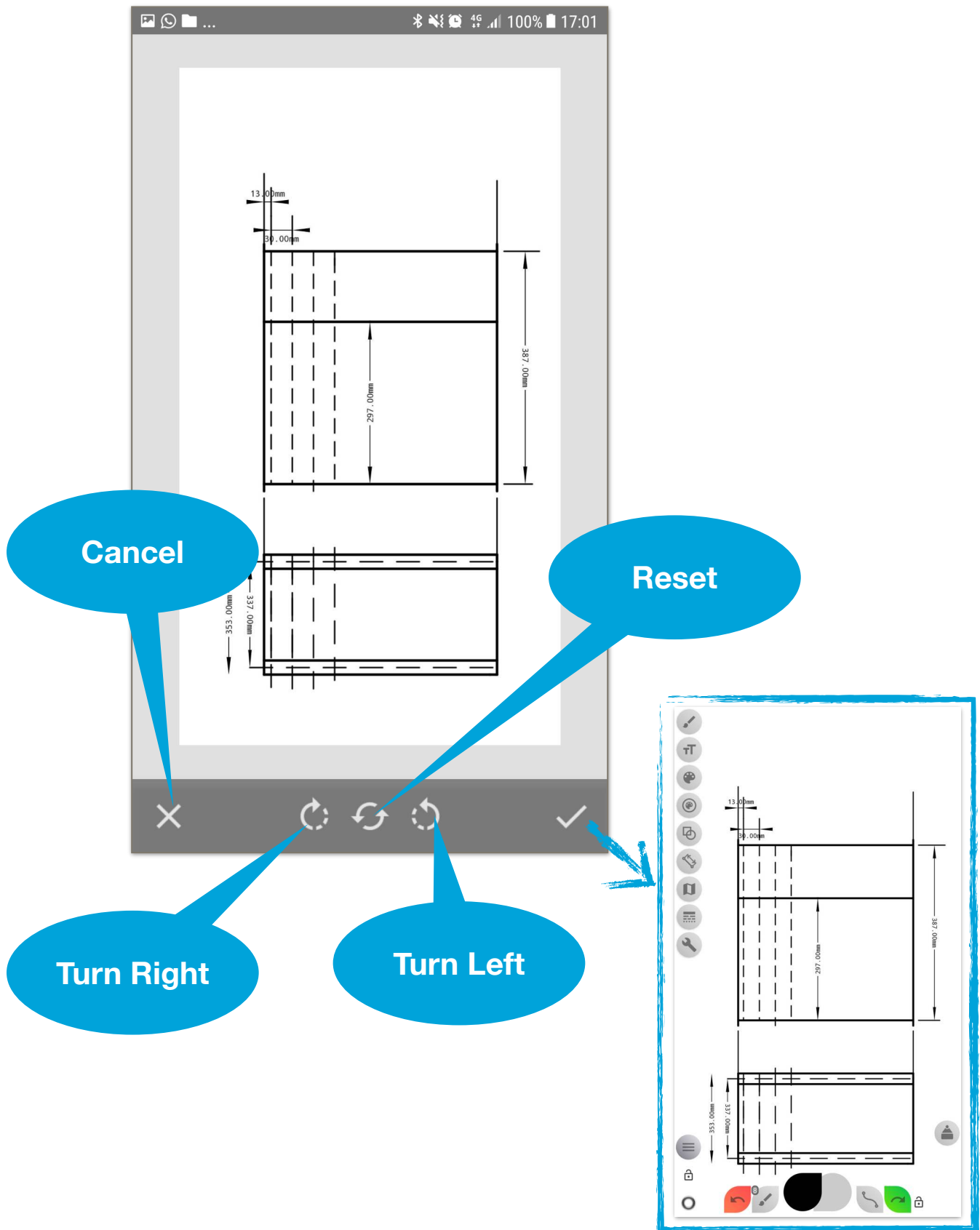
Resolution

Scale

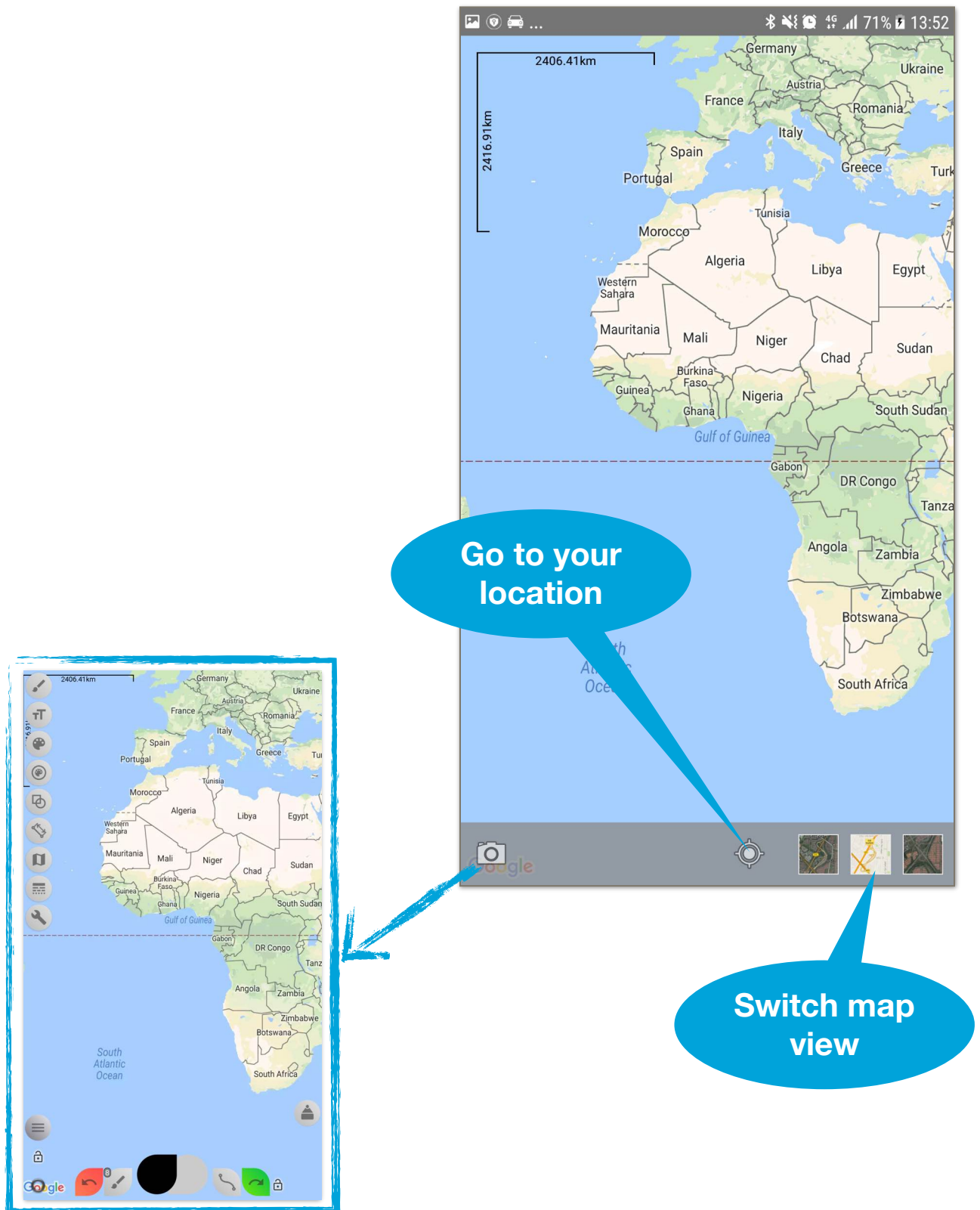
Size according to scale

Size according to Resolution
(potentially printed size of document)

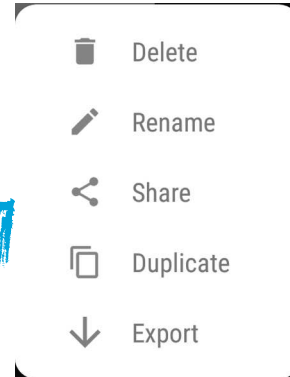
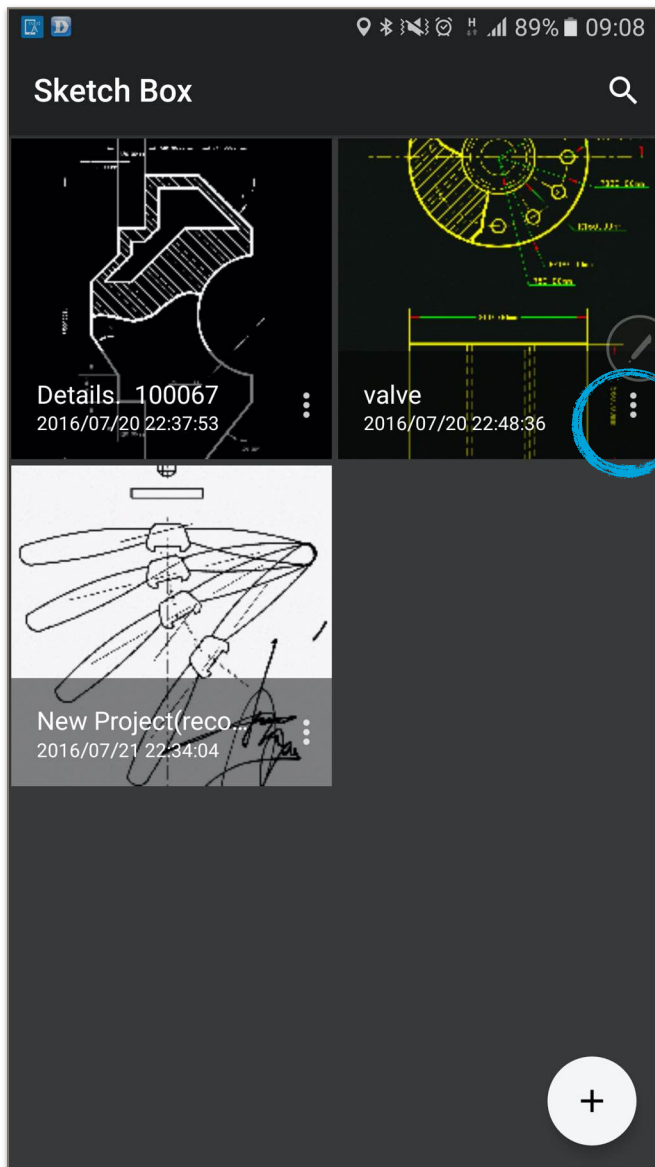
New Project From *Gallery*



New Project From *Google Maps*



Project context menu.



- *Delete* - will delete project from library
- *Rename* - Change name of the project
- *Share* - share project using available on your device ways.
- *Duplicate* - will make copy of selected project and open it
- *Export* - export/save project to device. Saved file can be import later on other device

Drawing

Main Concepts

There are 2 main style of drawing you can use in Sketch Box.

1. Shapes Drawing.
2. Free hand Drawing.

Lets concentrate more on first one, so... Shapes Drawing is used to produce precise sketches based on basic shapes like lines, ovals, rectangular and arcs. Shapes Drawing is “on” basically anytime you select any shape from menu.

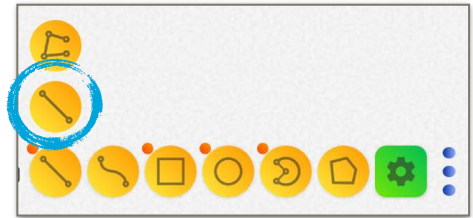
There are “Simple” and “Extended” modes of drawing figures on canvas. This modes are related on work flow you follow to get complete shape and in combination with manual input will allow you select required level of speed and precision.

To change between this modes you need to select “Settings” on “Basic Shapes” menu:

(see *Basic Shapes* menu for details)

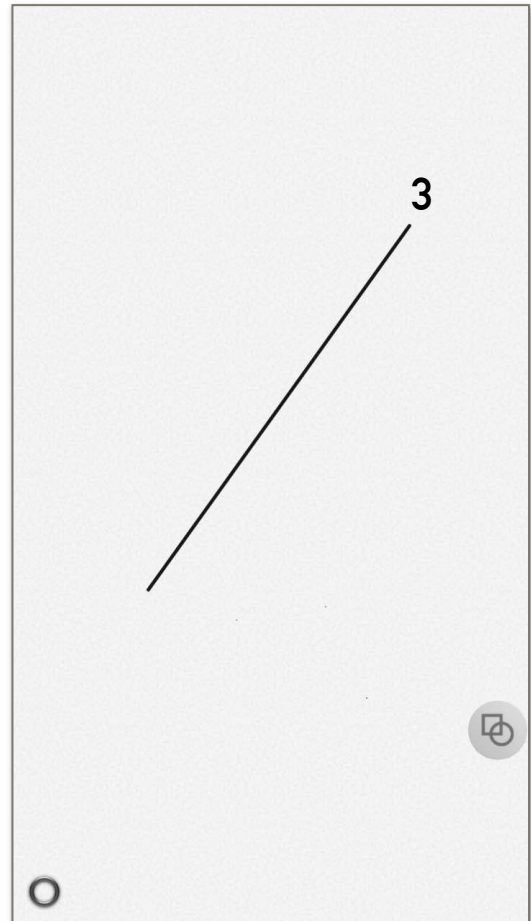
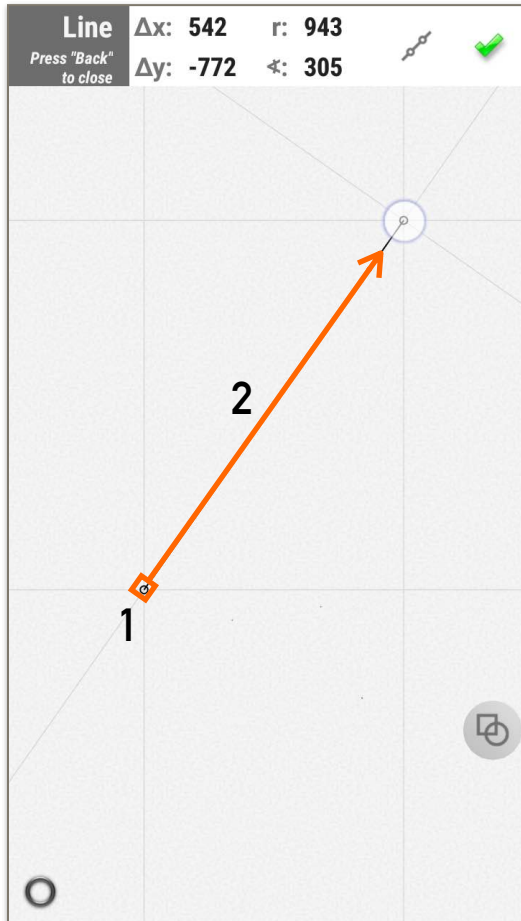
F.e., to produce single line on canvas you will normally follow next steps, and so does

Select!



Simple mode.

1. touch down (position on first point)
2. move finger on screen (to second point)
3. touch up(remove finger from screen).



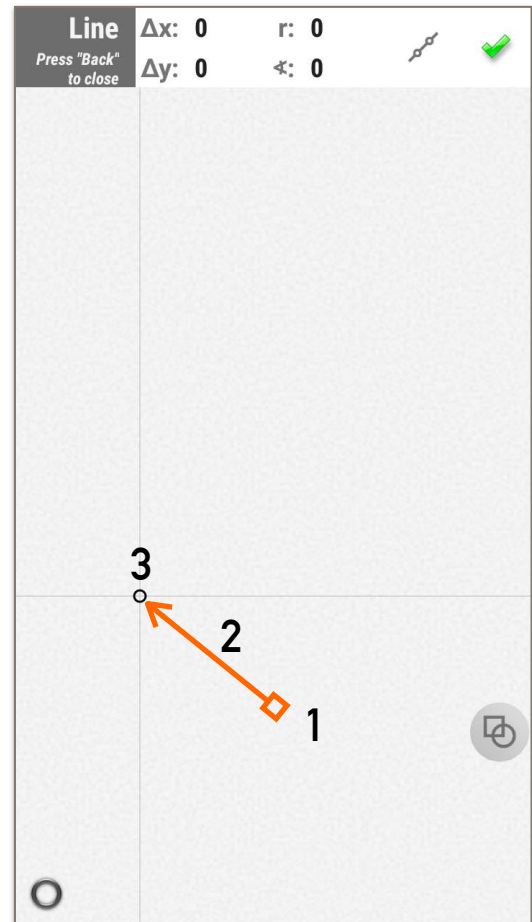
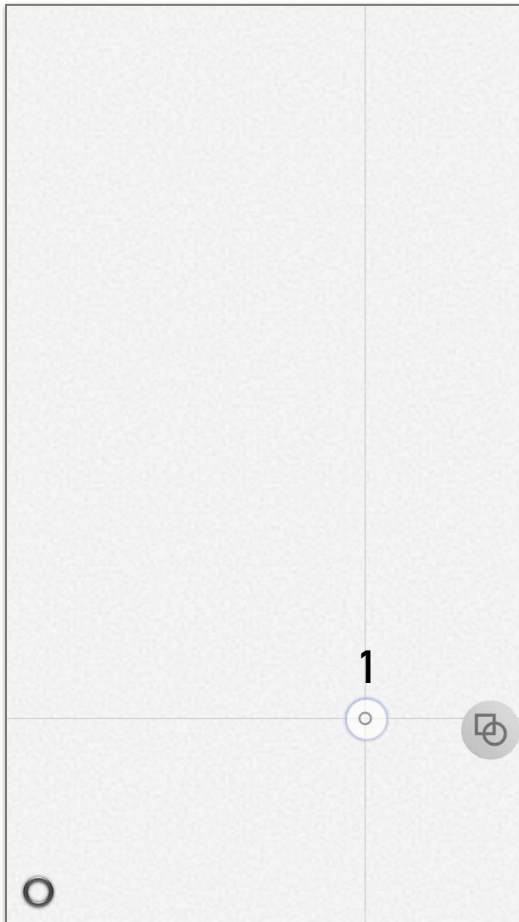
Entire line was build by one continuous touch.

It has advantages and disadvantages:

From one side it is fast and simple, from other side you need to touch screen in exact point to get desired result,

what is often difficult as your finger is closing needed area on canvas.

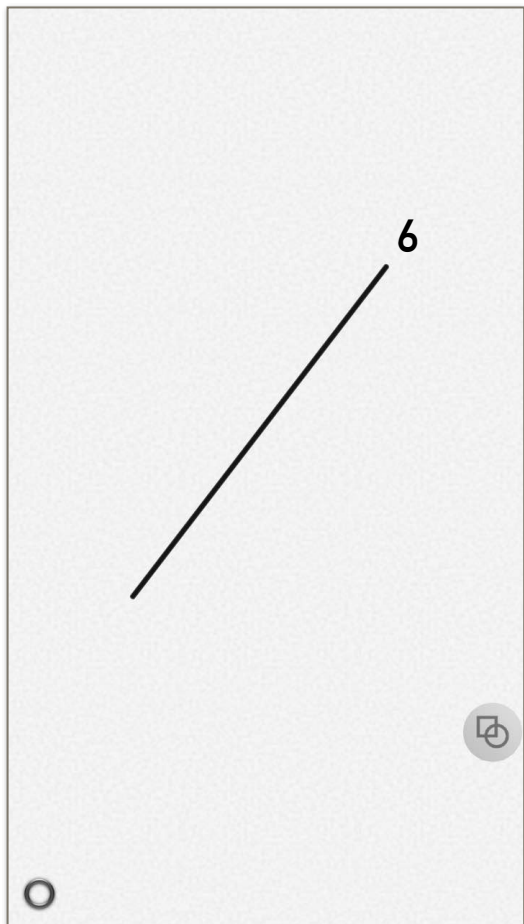
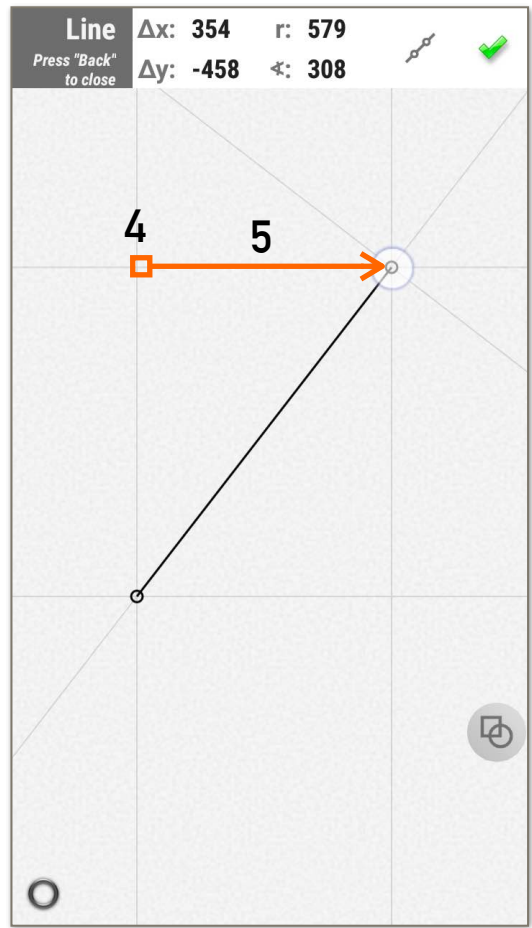
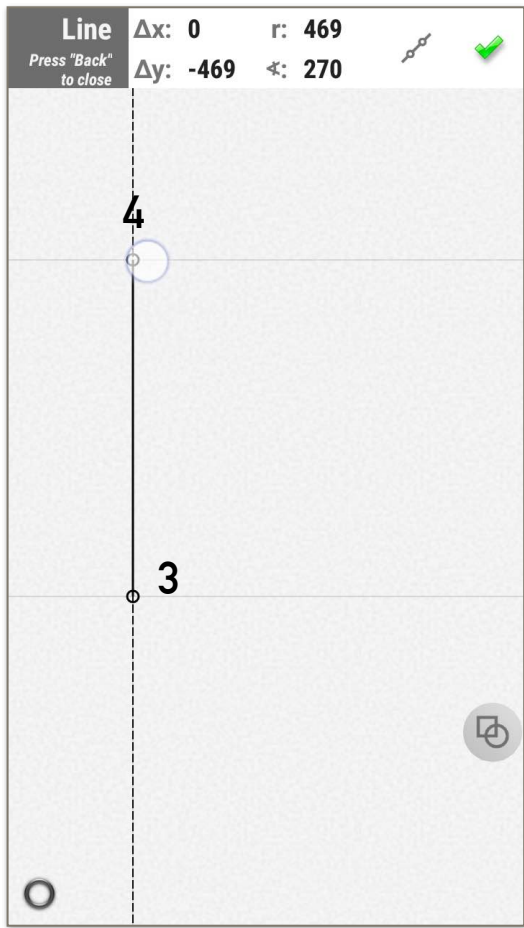
Extended Mode.



is aimed to overcome this problems.

In Extended mode you will follow next flow.

1. touch down
2. move to position of the first point
3. touch up (to fix first point).
4. touch down



5. move (to position on second point)
6. touch up (to fix second point).
7. touch down
8. move (to position on third point)
9.

Yes! there can be countless amount of points when we draw shapes in “*continuous mode*”, we will discuss this later.

So our line was build by 2 separated touches.

Now it is more accurate but a bit slower.

You can tell - “ we still cannot see canvas under finger..?” well..correct, but still drawing quite fast :)

So now we came to most precise drawing a slowest of course. This is combination of 2 described above modes with

Manual position input.



Sketch Box has no absolute coordinates system, so all positions are relative to previous point.

Obviously, according to this concept we need some starting point (at the moment starting point is always given by touch).

One more I need to mention before we begin: relative position can be specified in 2 ways:

- first one - Δx increment and Δy increment (cartesian)
- second one - radius r and angle $\angle$ (polar)

Lets draw same line in extended mode with manual positions input and lets this time use

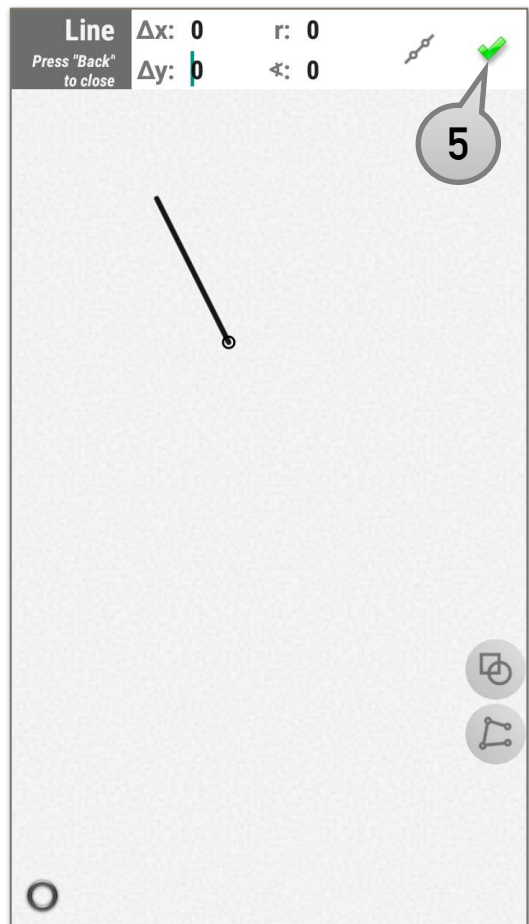
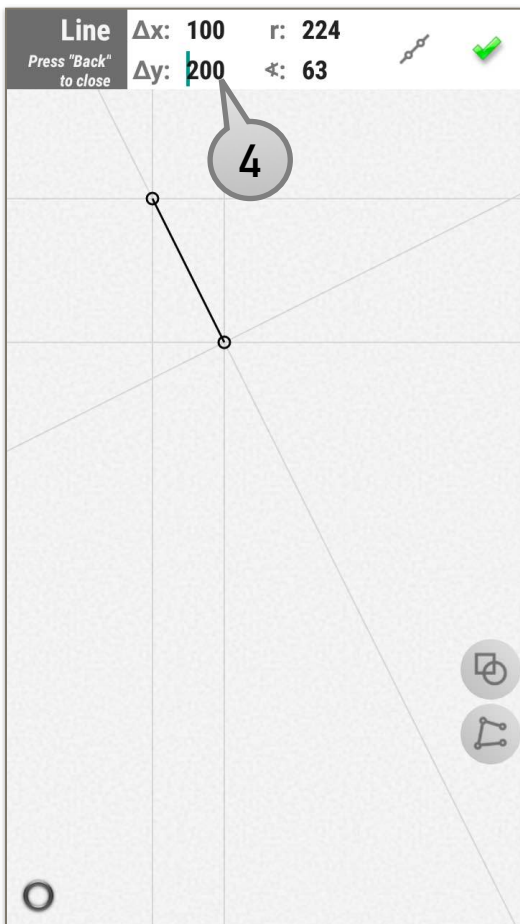
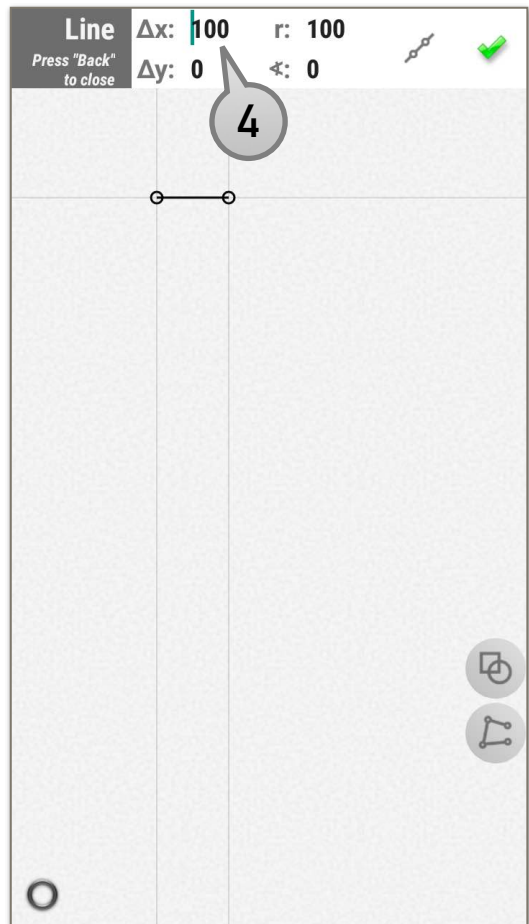
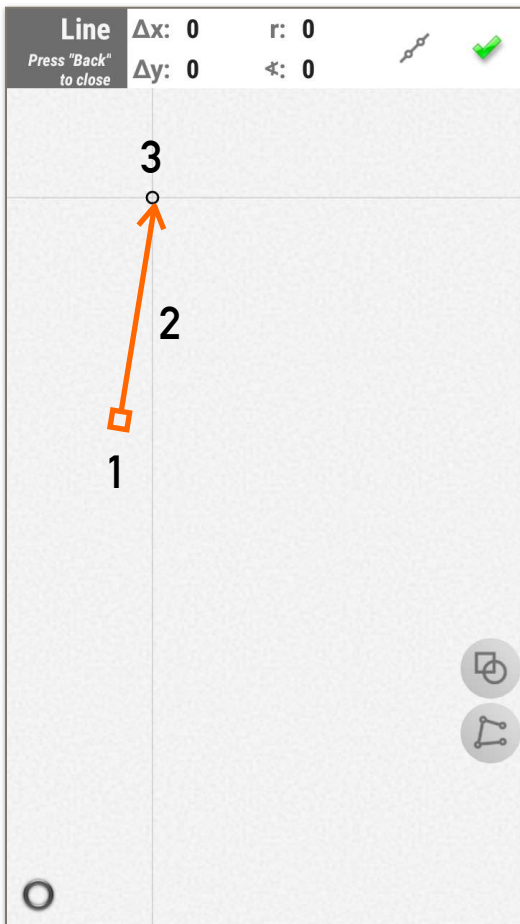
Continuous mode.



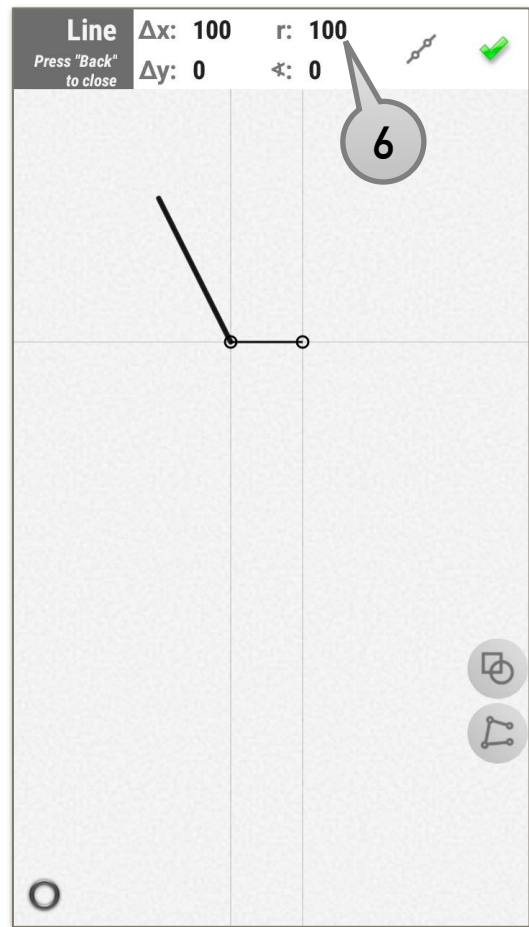
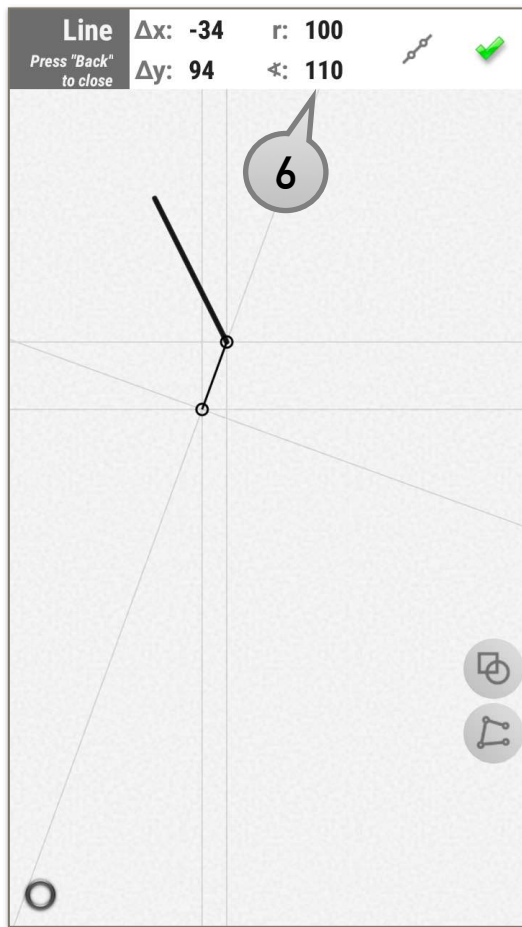
In this mode all shapes drawn one by one continuously when finish point of the current shape is automatically start point for next one.

Lets start...

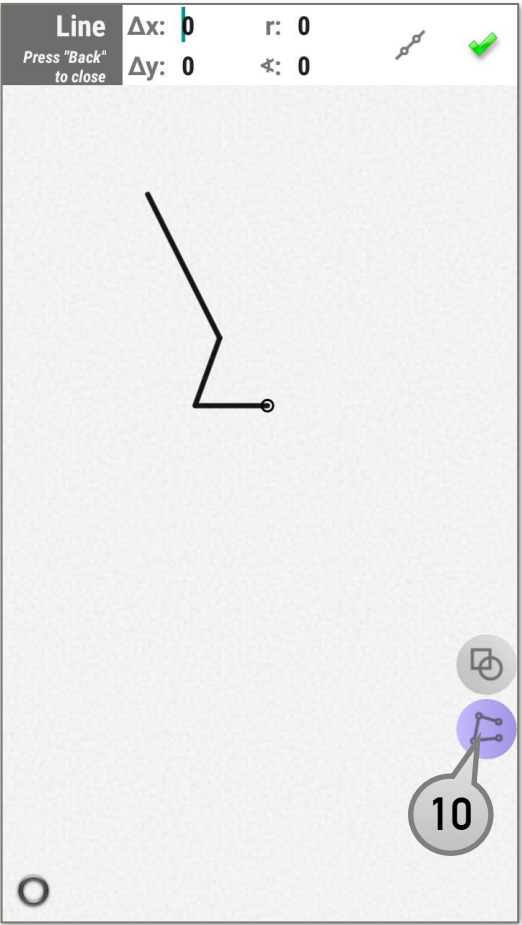
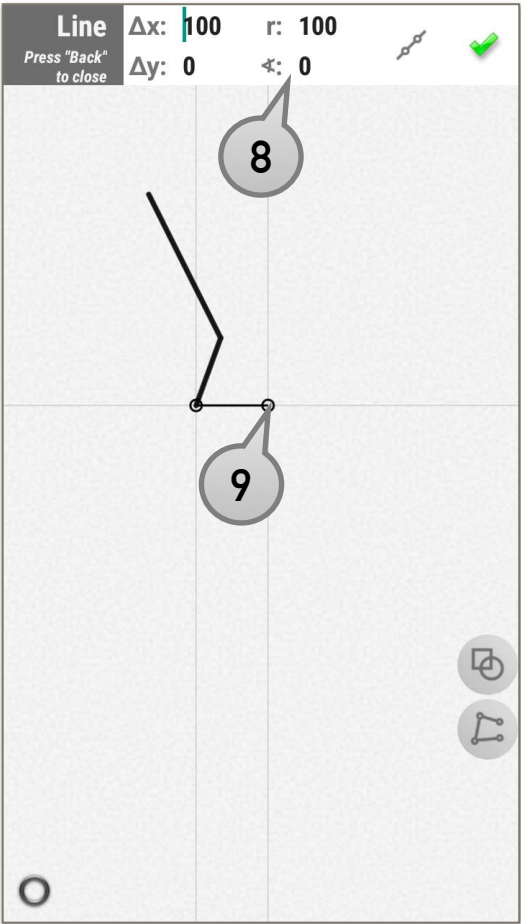
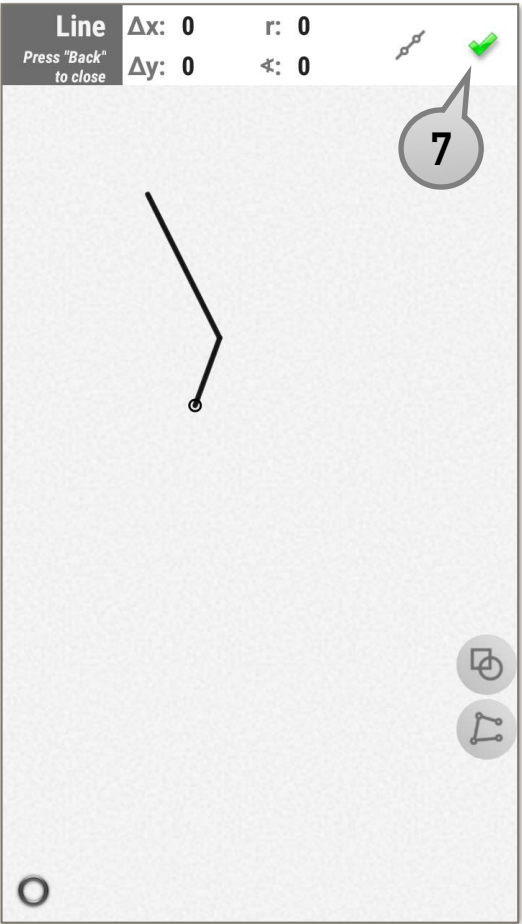
1. touch down
2. move (to position on first point)
3. touch up (to fix first point)



4. Enter Δx and Δy for next point in input box, *it will show line to next position whenever you accept (press “Done” on virtual keyboard or move to next input box) input.*



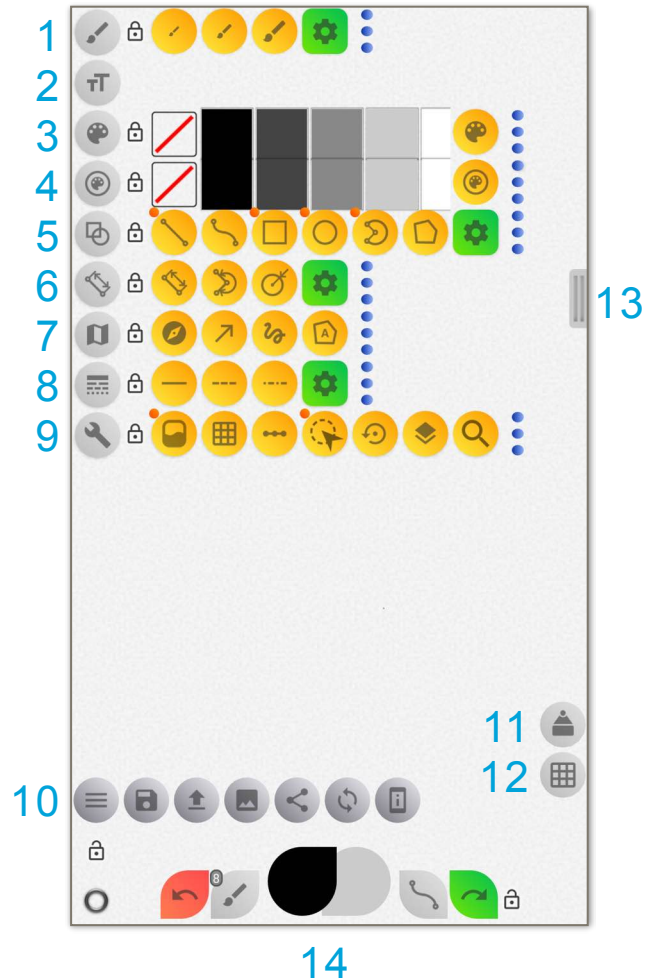
5. Click “Accept” button on *input bar* 
6. Enter r and $\angle$ for next point in input box, *it will show show line to next position whenever you accept (press “Done” on virtual keyboard or move to next input box) input.*
7. Click “Accept” button on *input bar* 



8. Enter Δx and Δy for next point
9. Continue...
10. Click “Continuous mode” on *context bar* to exit.

User Interface

1. Line Size Menu.
2. Text Menu.
3. Line Colour Menu.
4. Fill Colour Menu
5. Shapes Menu.
6. Dimensions Menu
7. Map tools Menu
8. Line Style Menu
9. Tools Menu
10. File Menu
11. Brush Menu
12. Context menu
13. Layers Drawer
14. Status Bar



Sub menu available



Long Click Menu available

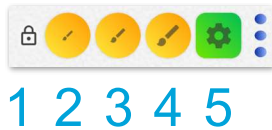
File Menu



1 2 3 4 5 6 7

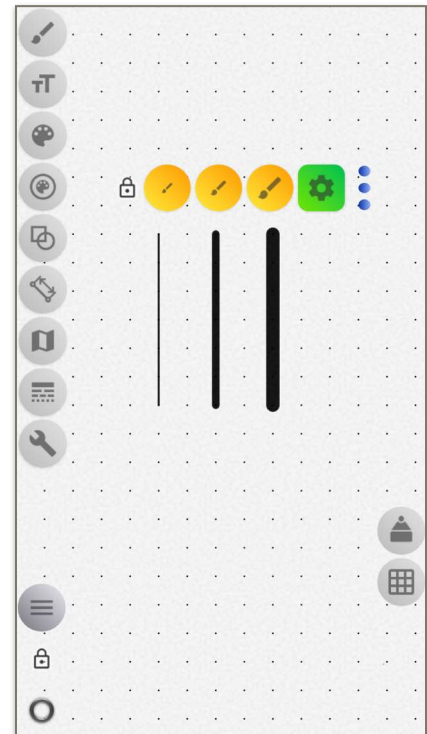
1. Save current project.
2. Export/save result to disk (.png)
3. Insert Image
4. Share project result (.png)
5. Clean Project
6. Information
7. Settings

Line Size Menu

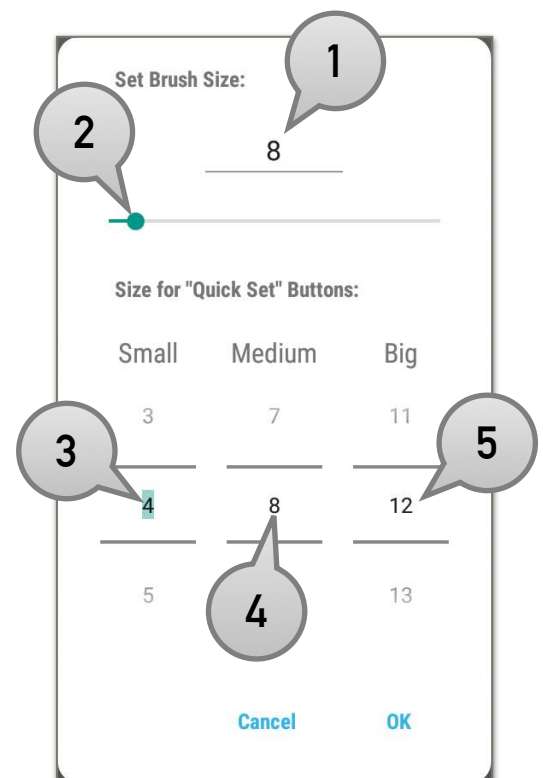


Line Size menu is aim to control lines thickness or brush width. This menu provide fast access to 3 size presets and custom size selector

1. Lock Menu
2. Select Small Brush Preset
3. Select Medium Brush Preset
4. Select Big Brush Preset
5. Open Brush Presets Settings.



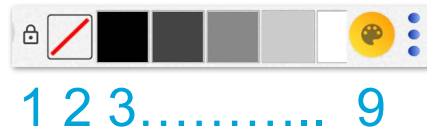
1. *Current Brush Size*
2. *Brush Size Selector*
3. *Small Preset Brush Size Picker.*
4. *Medium Preset Brush Size Picker.*
5. *Big Preset Brush Size Picker.*



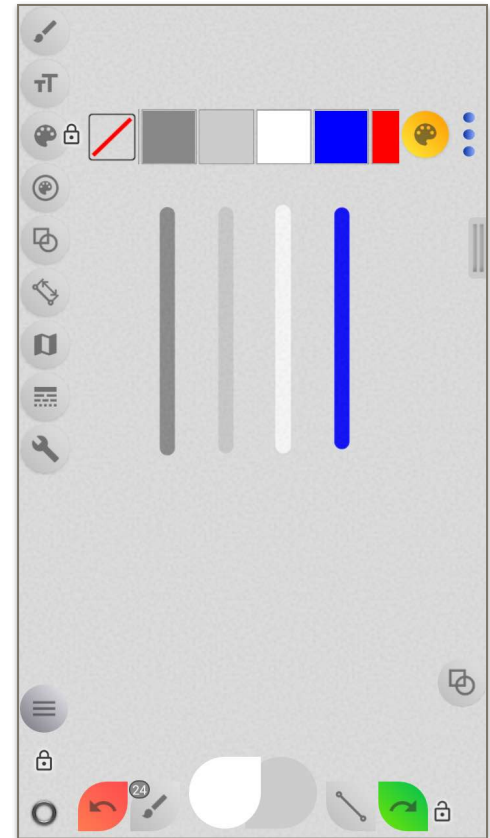
Text Menu

Open  Text Tool (see *Text Tool* for details)

Line Colour Menu



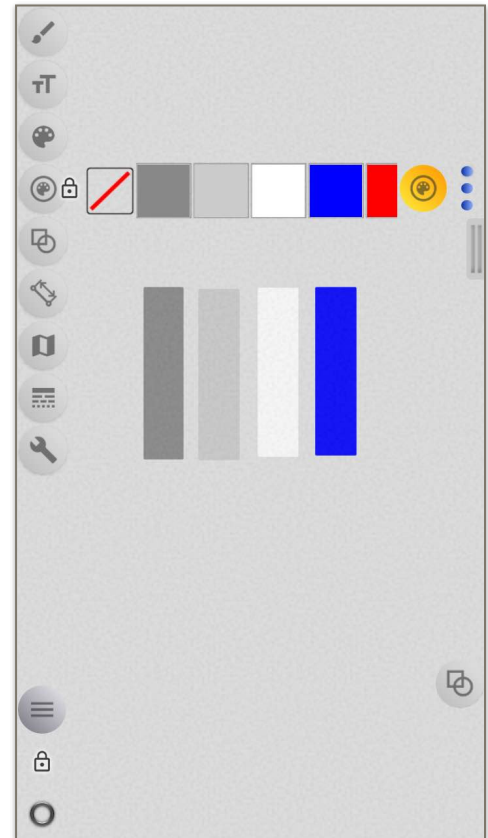
1. Lock Menu
2. Select “No Color” (transparent)
3. Select ..n from Colour History
4. Select Custom Colour (see *Custom Colour Tool* for details)



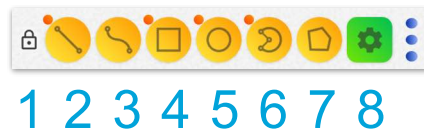
Fill Colour Menu



1. Lock Current Menu
2. Select “No Color” (transparent)
3. Select ..n from Colour History
4. Select Custom Colour (see *Custom Colour Tool* for details)



Shapes Menu



1. Lock Menu

2. Line



a
b

A. *Continuous mode*

B. *Line*

- Please refer to Drawing/Main Concepts

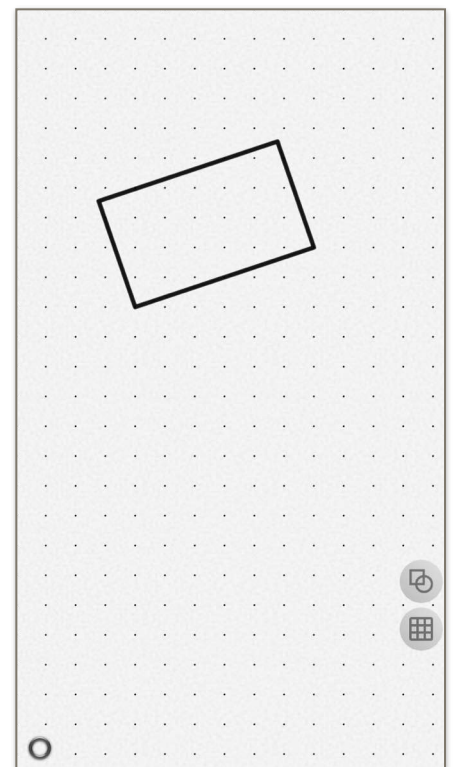
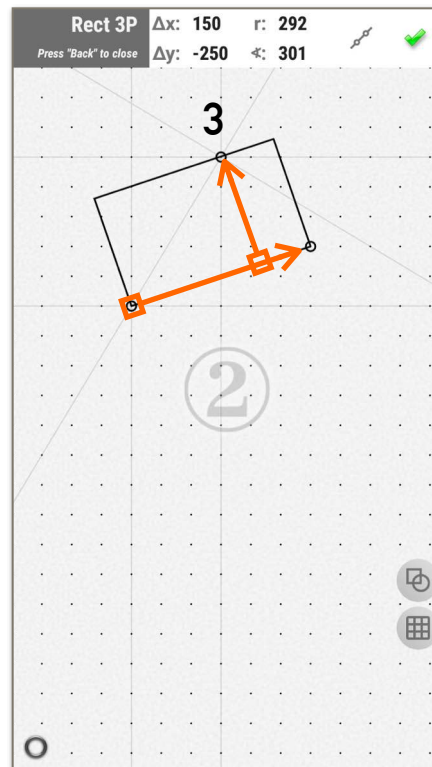
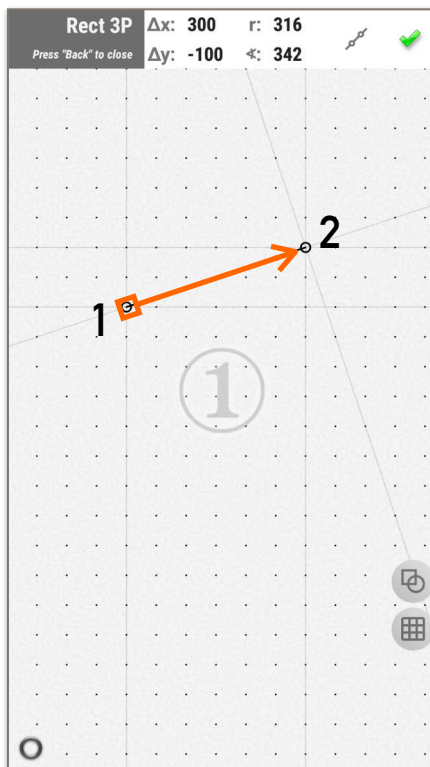
3. Curve, will switch to “Free hand” mode.

4. Rect

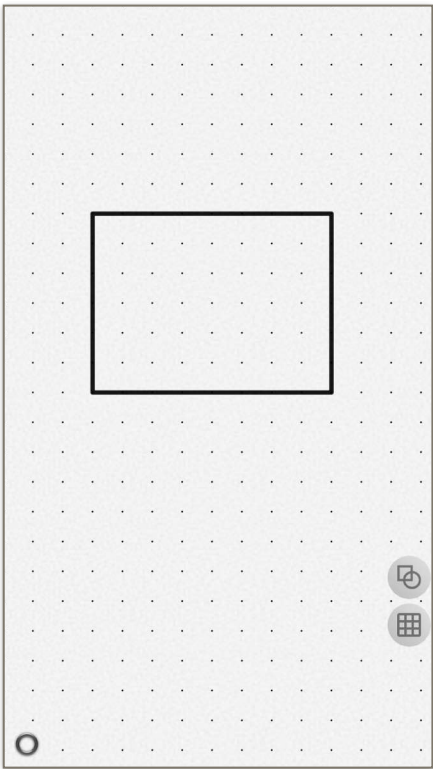
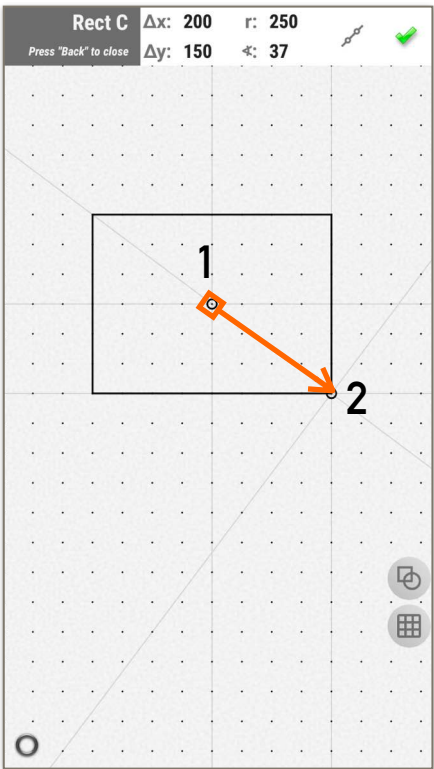
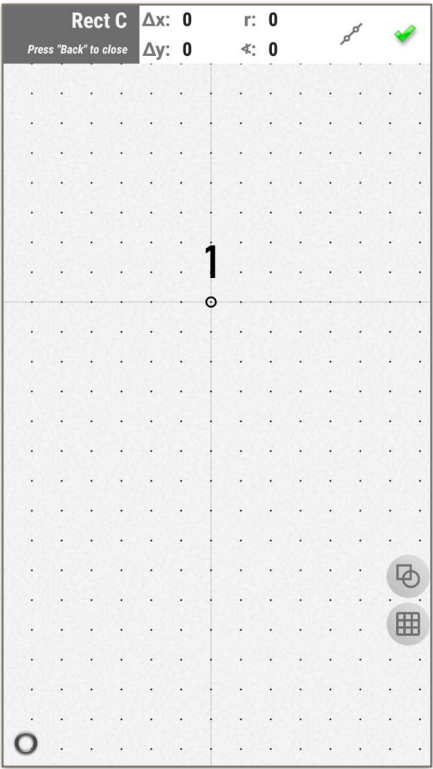


a
b
c

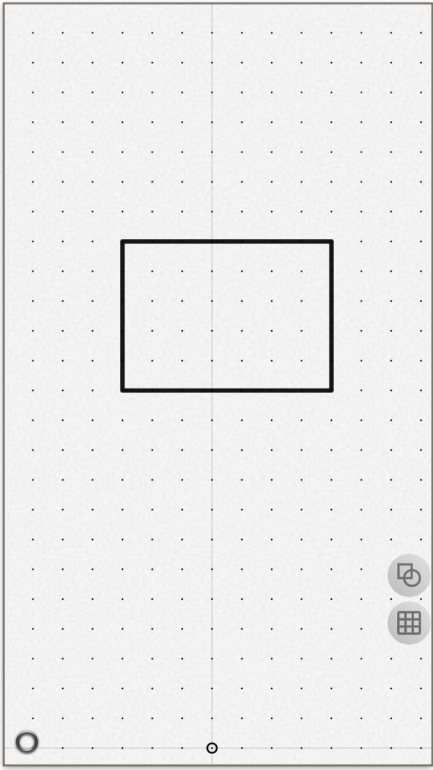
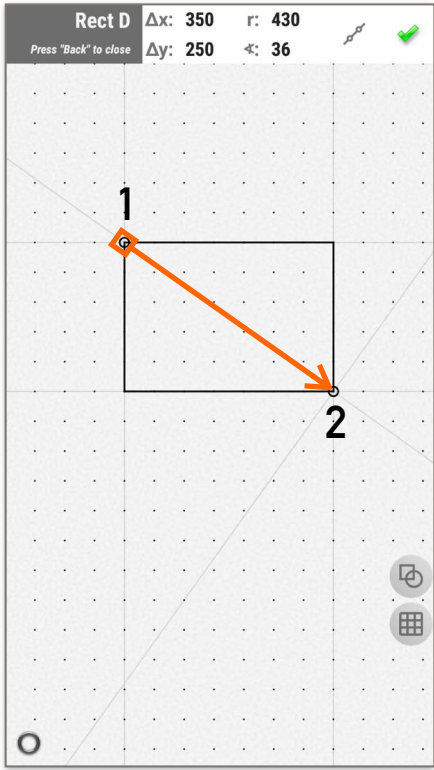
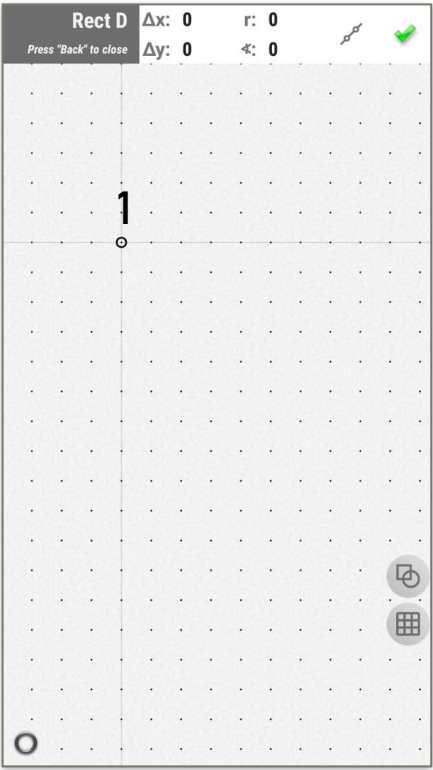
A. 3 Points Tilted Rect



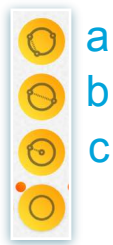
B. Centered Rect



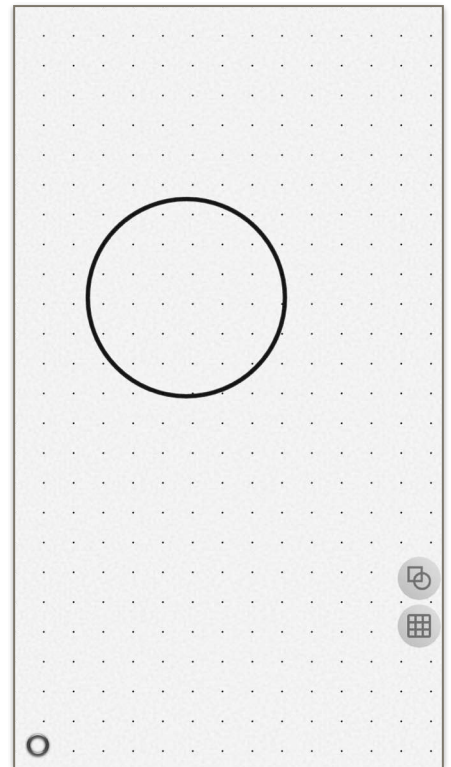
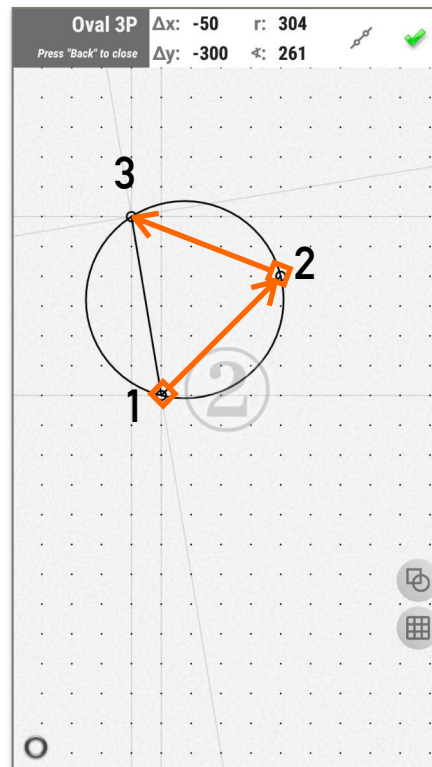
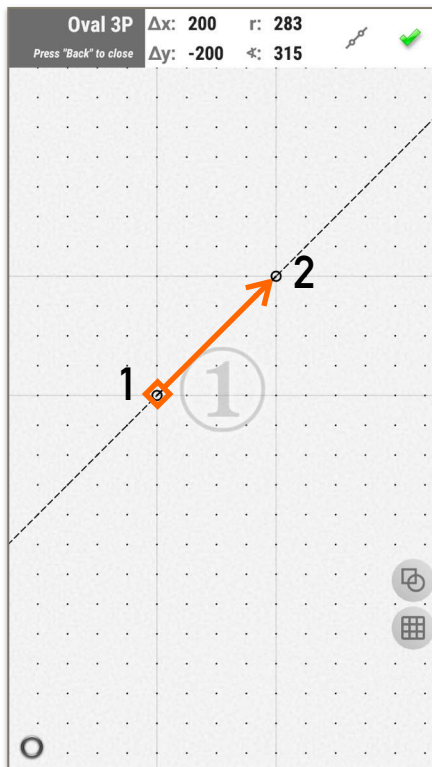
C. Diagonal Rect



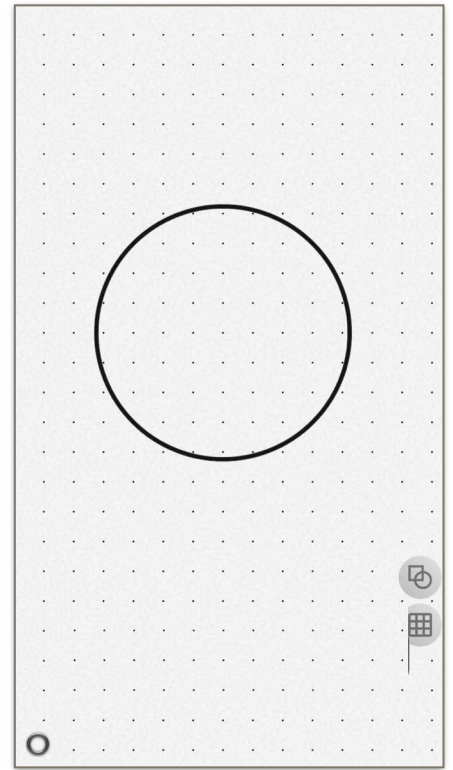
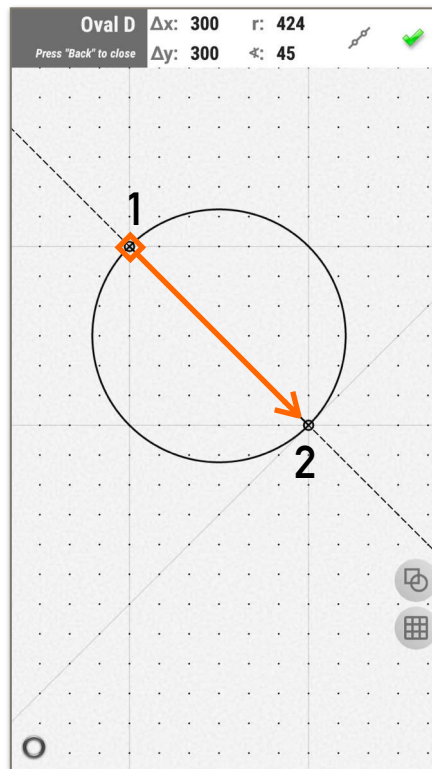
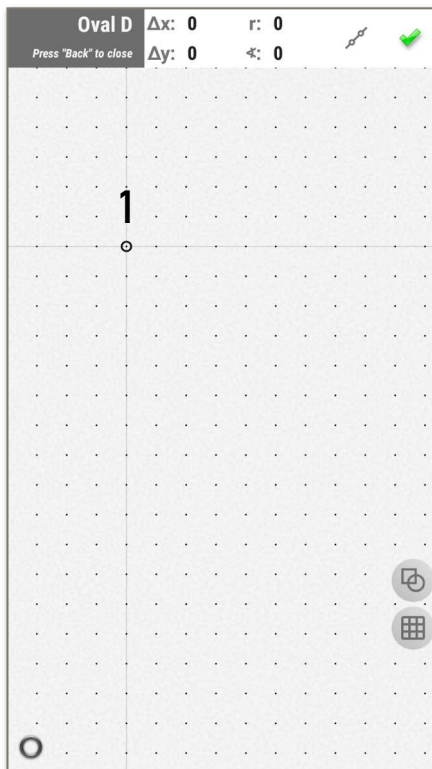
5. Oval



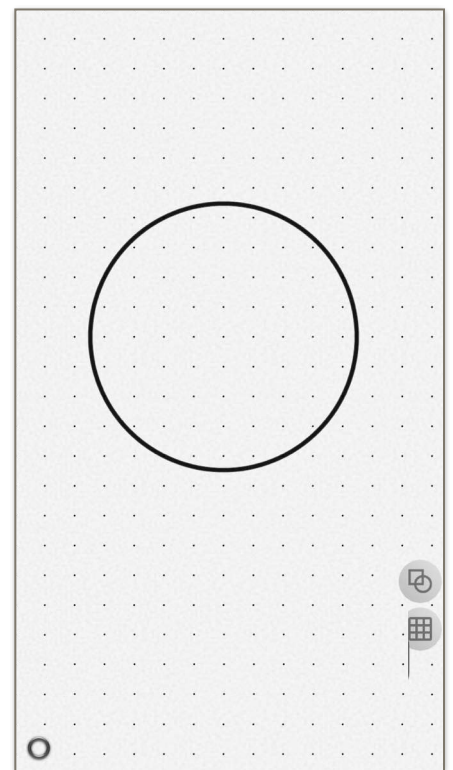
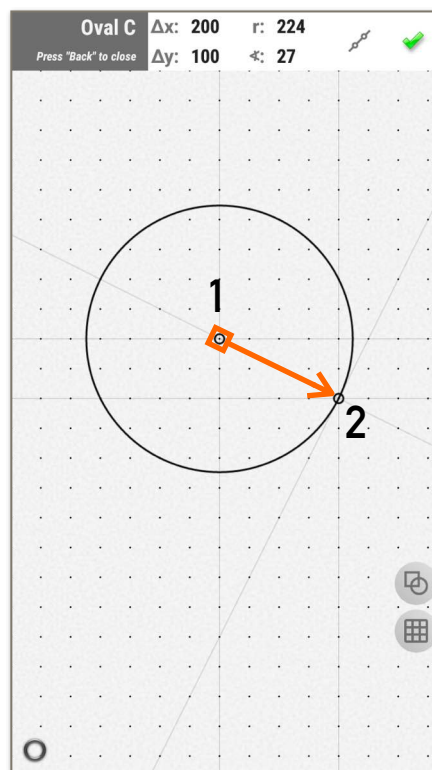
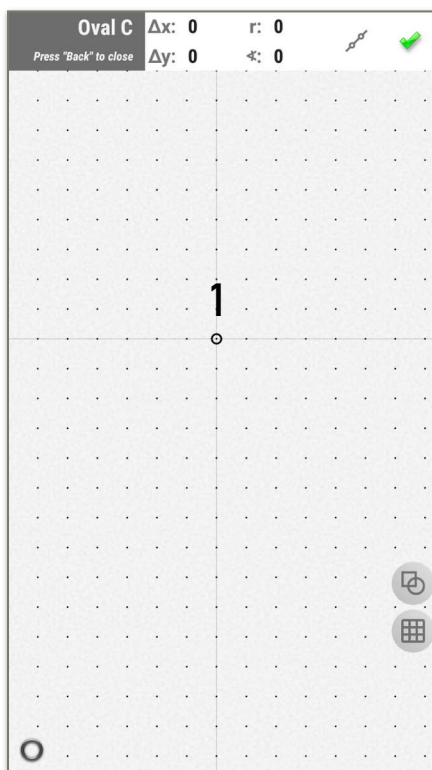
A. *3 Points Oval*



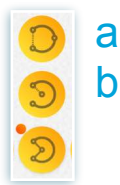
A. 2 Points, diagonal oval



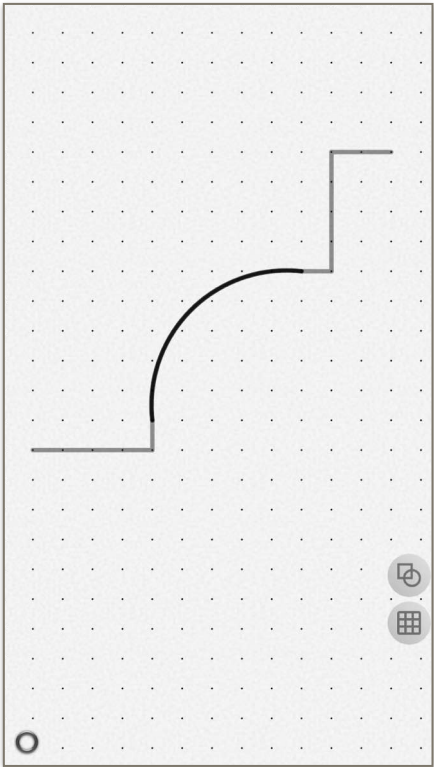
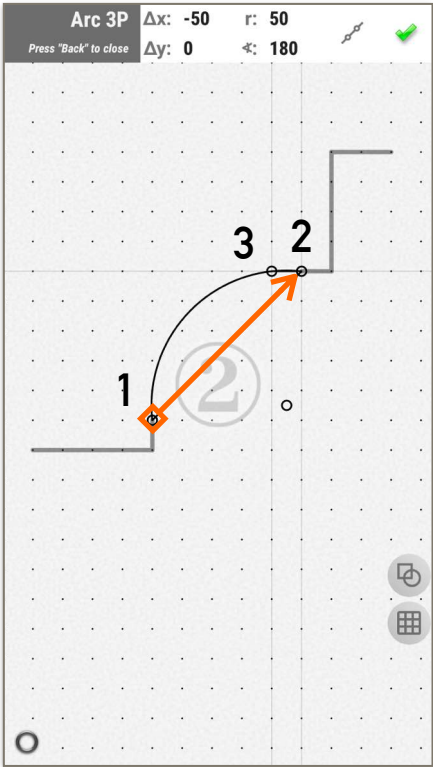
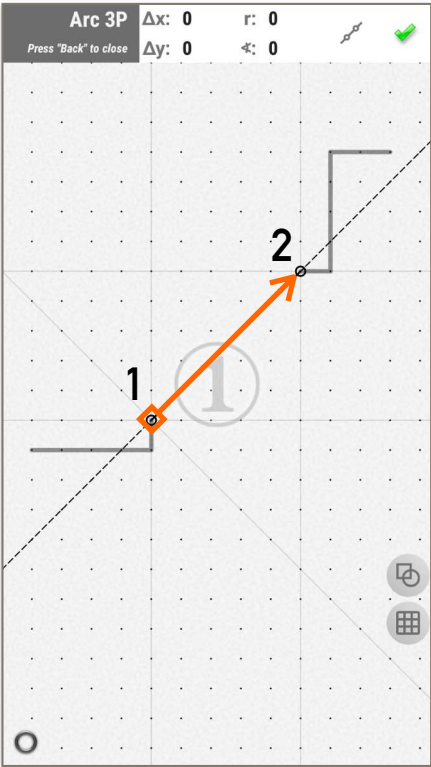
B. Center Point oval



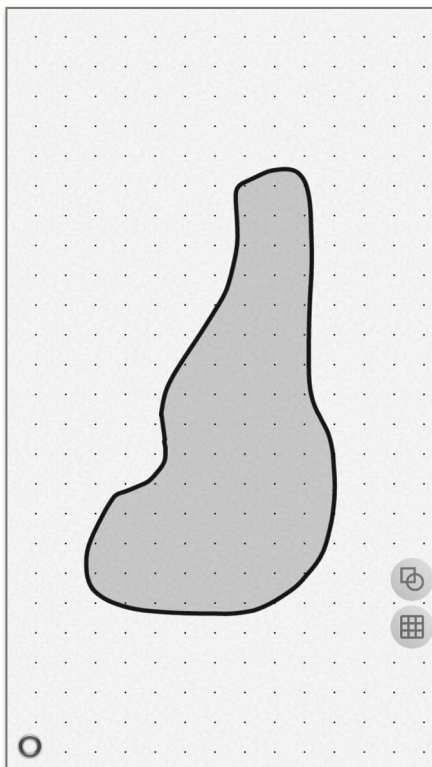
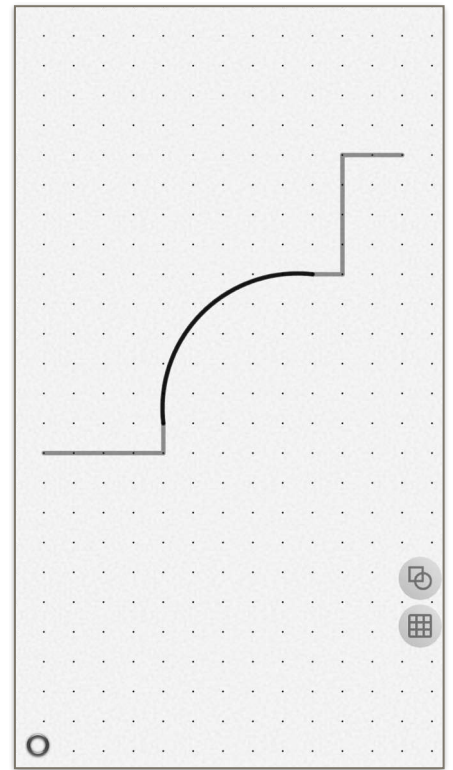
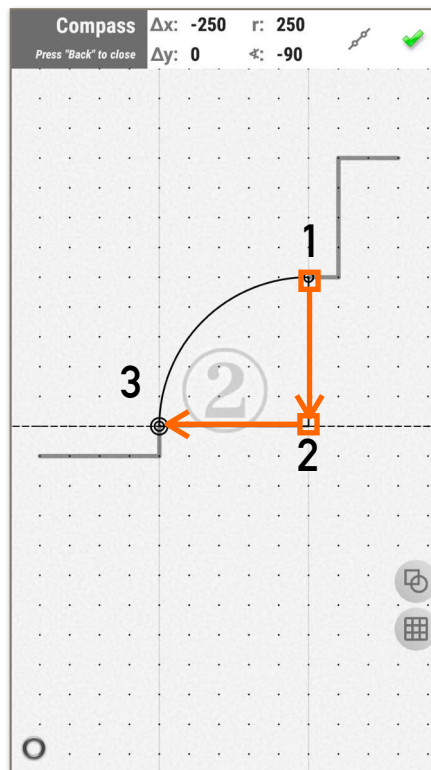
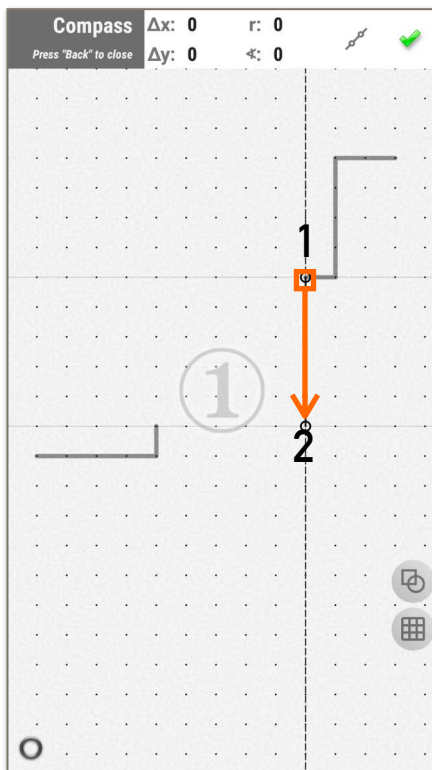
6. Arc



C. 3 Points Arc



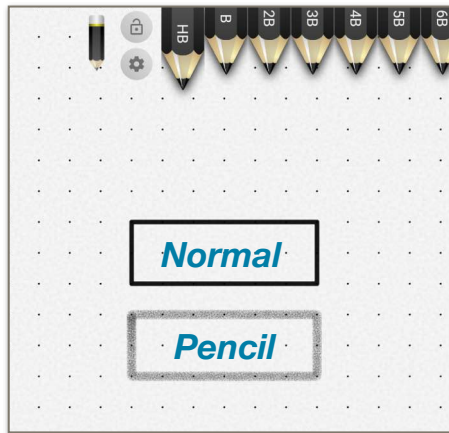
D. Angular Arc (compass)



7. Free shape. To produce closed freehand driven shapes.

8. Settings

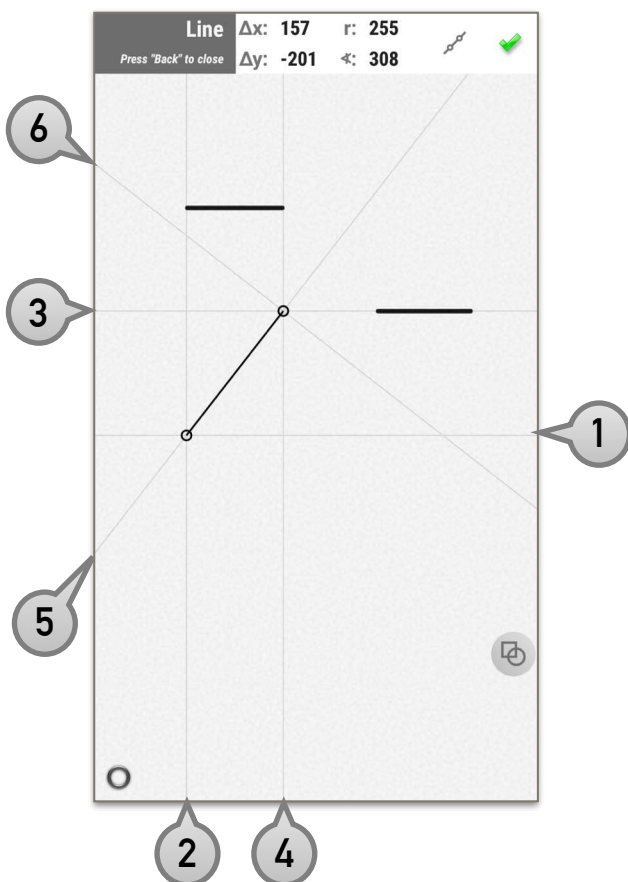
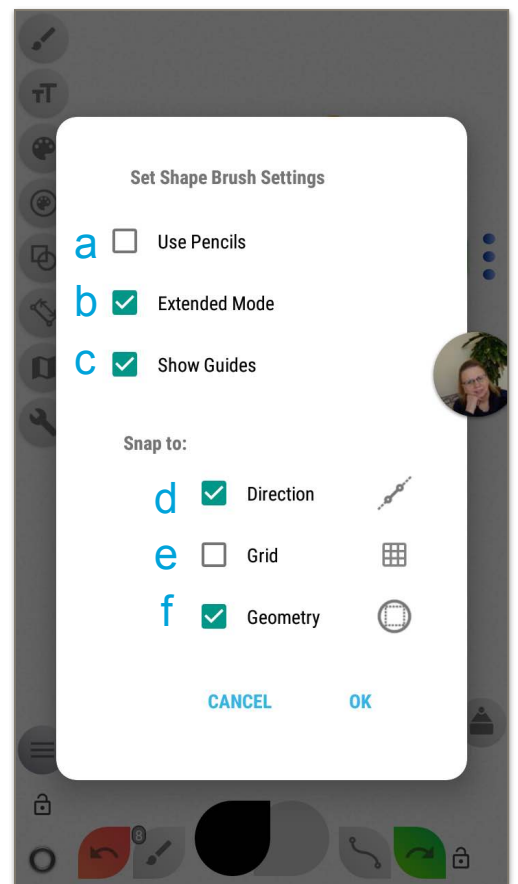
A. Use Selected Pencil to draw lines



B. Switch to Extended mode (Please refer to Drawing/Main Concepts)

C. Show/Hide guides

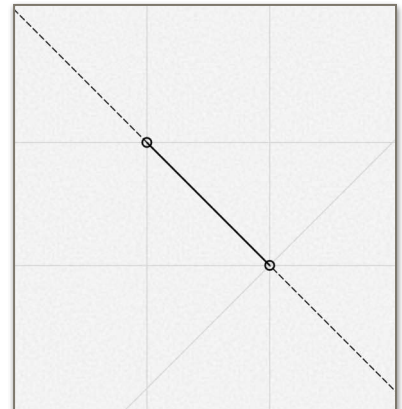
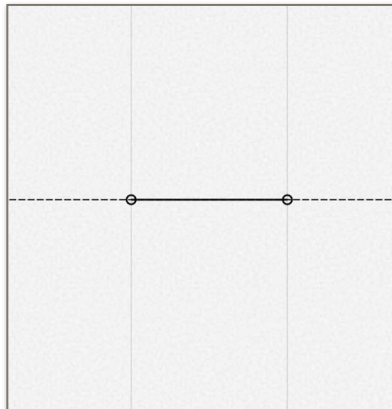
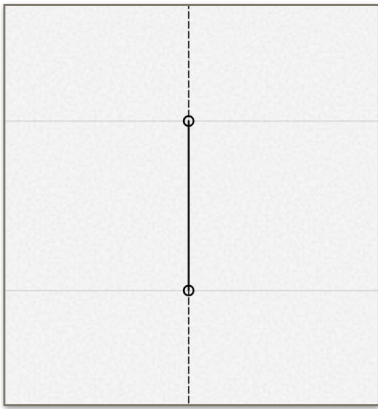
Guides aimed to help position points in relation to existing drawing elements



1. Starting point Horizontal guide
2. Starting point Vertical guide
3. End point Horizontal guide
4. End point Vertical guide
5. Extension (directional) guide
6. Perpendicular guide (90° to line direction)

D. Snap to Directions.

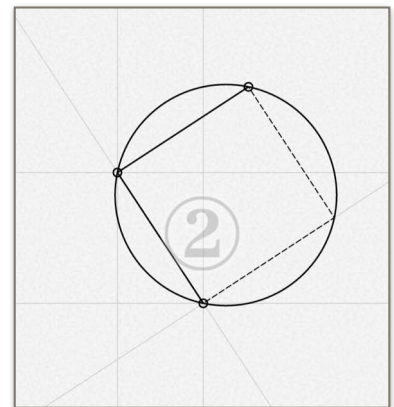
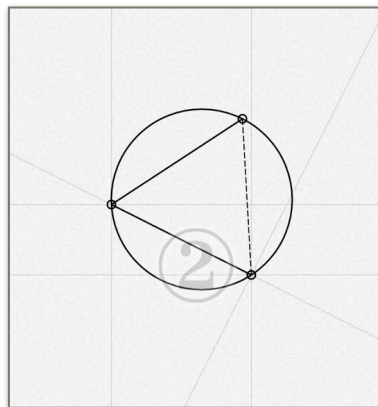
- This option allows you to snap to extension guide directions 0, 45, 90, 135, 180, 225, 270, 315 degrees. Basically, it will help you to draw horizontal, vertical and 45deg. lines fast without using other tools like “Grid tool”.



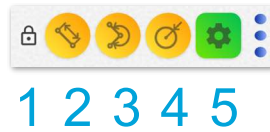
E. Snap to Grid (Please refer to Tools/Grid Tool)

F. Snap to Geometry

- This option allows you to snap to infill geometrical shapes like triangle or rectangle.

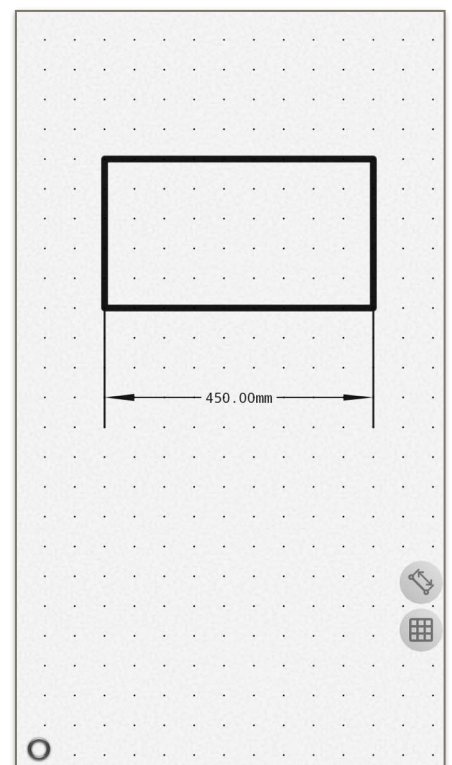
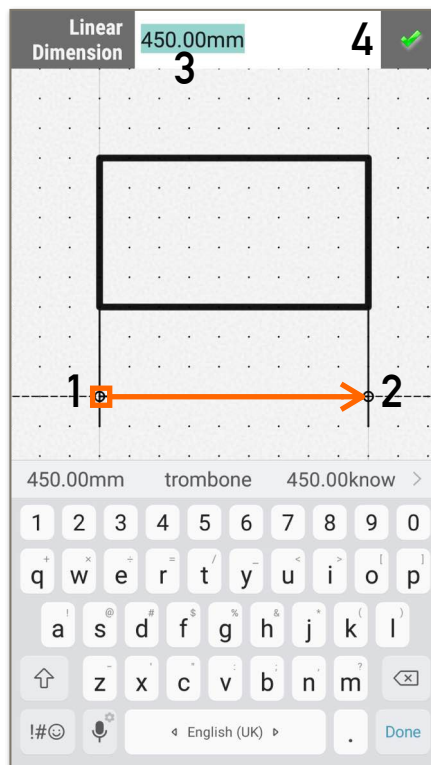
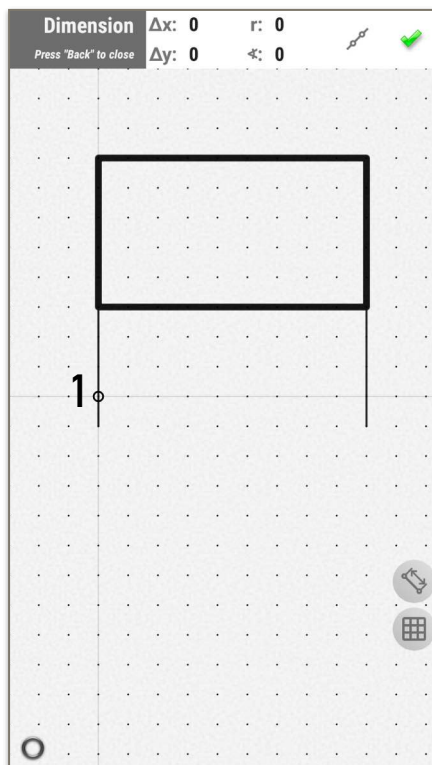


Dimensions Menu

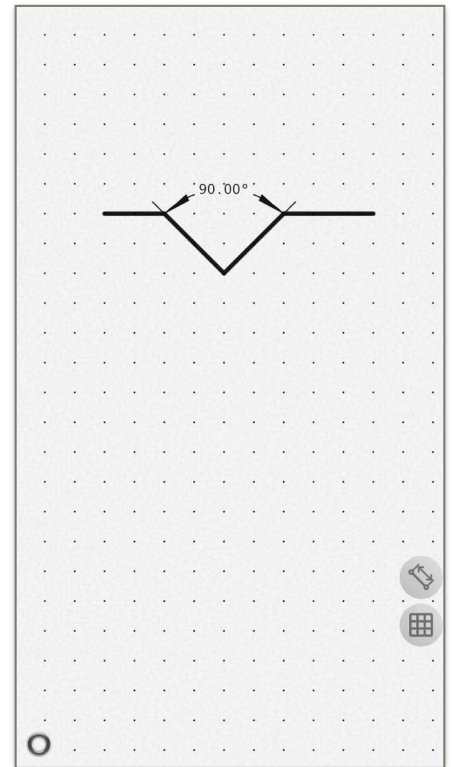
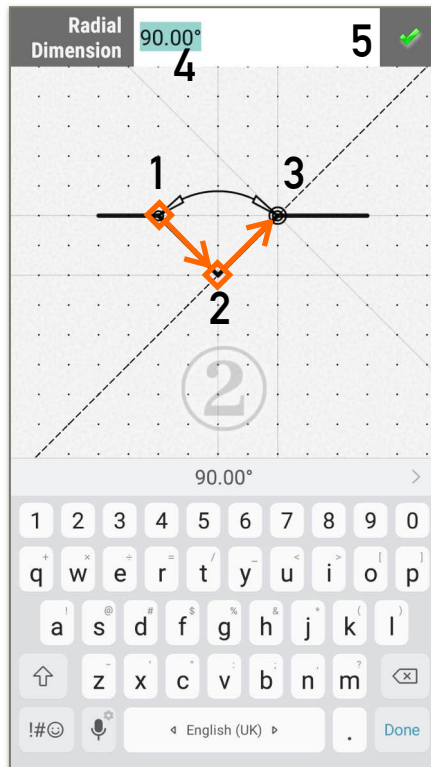
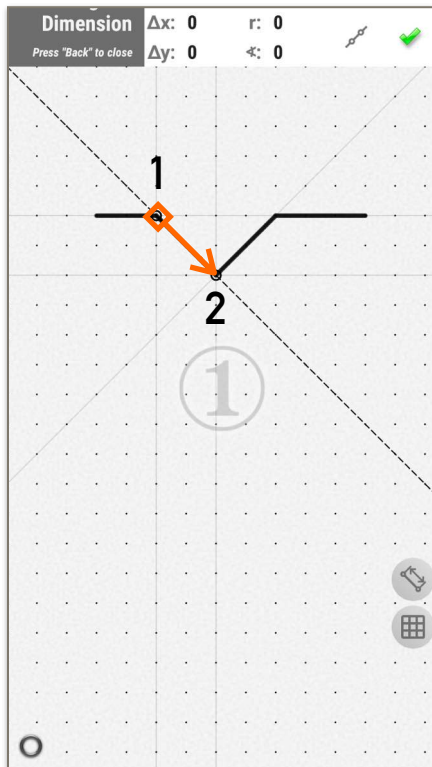


Sketch Box support assisted and semi assisted dimensioning. That means you can simply draw dimension and app will automatically mention value according to current scale ratio, or you can set to manual values input in Dimensions settings menu (see below).

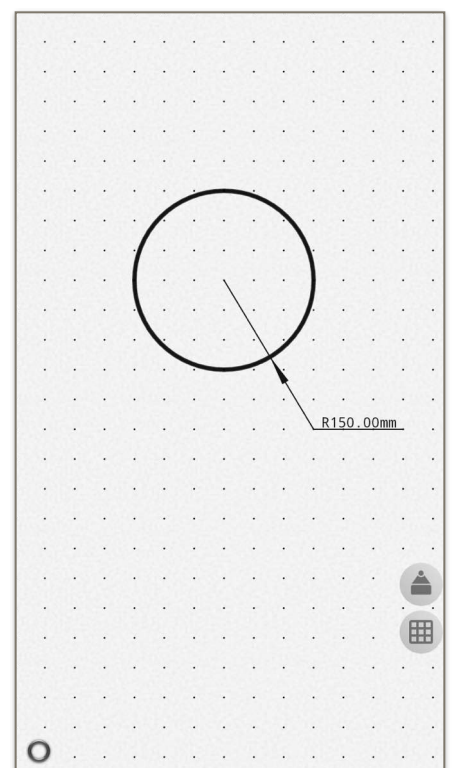
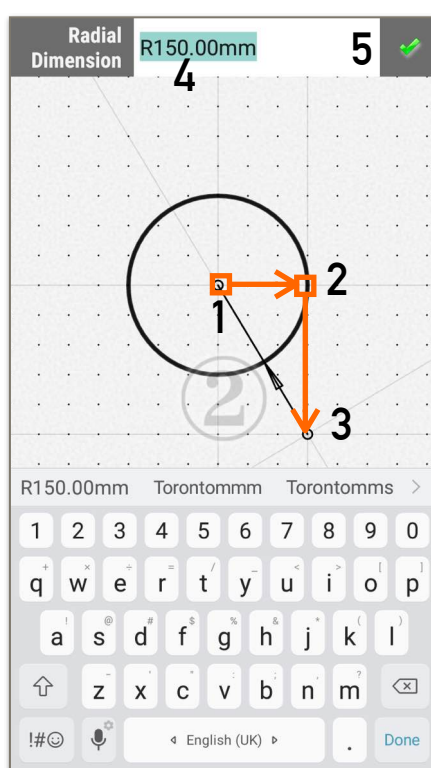
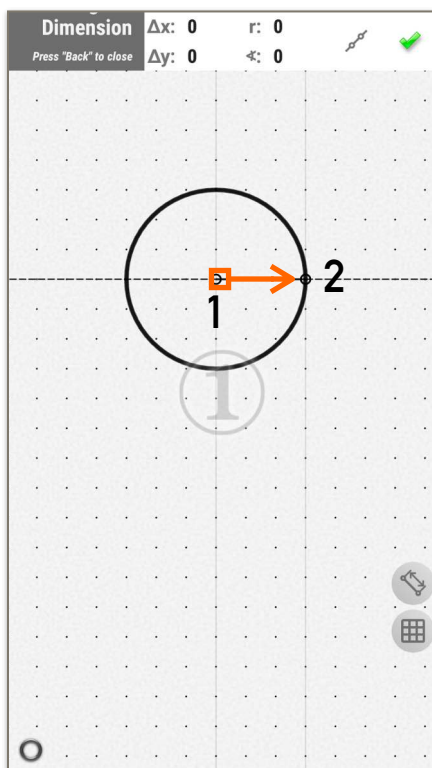
1. Lock Menu
2. Linear Dimensions (step 3 and 4 only apply when manual values input requested).



3. Angular Dimensions



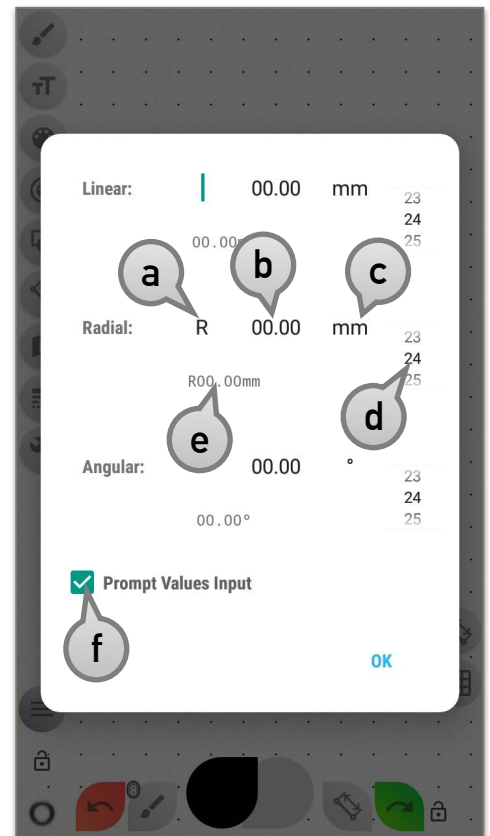
4. Radial Dimensions



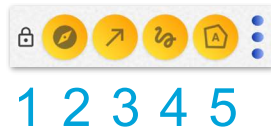
5. Settings

Settings window consist 3 sections for each dimension type which have:

- A. *Prefix*
- B. *Value precision selector*
- C. *Affix*
- D. *Font size*
- E. *Current settings preview.*
- F. *Switch for enable/disable prompt values manual input.*



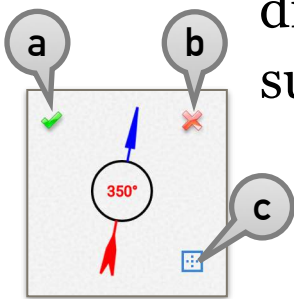
Map tools Menu



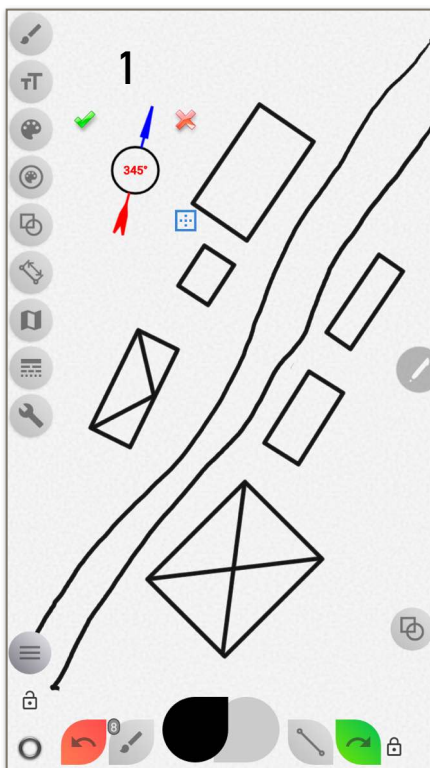
Sketch Box provide set of tools to extend functionality in geo related applications, specially Google Maps based projects.

1. Lock Menu
2. Compass tool.

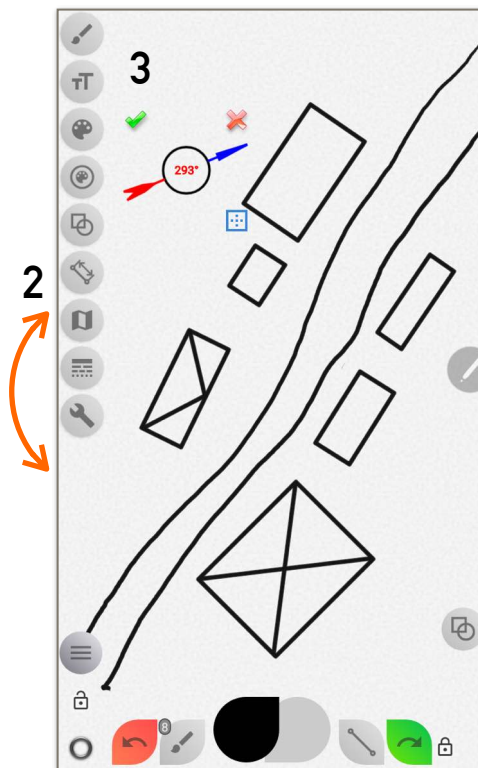
Aimed to provide easy way to fix relations between drawings and North direction. Useful for field surveys sketches.



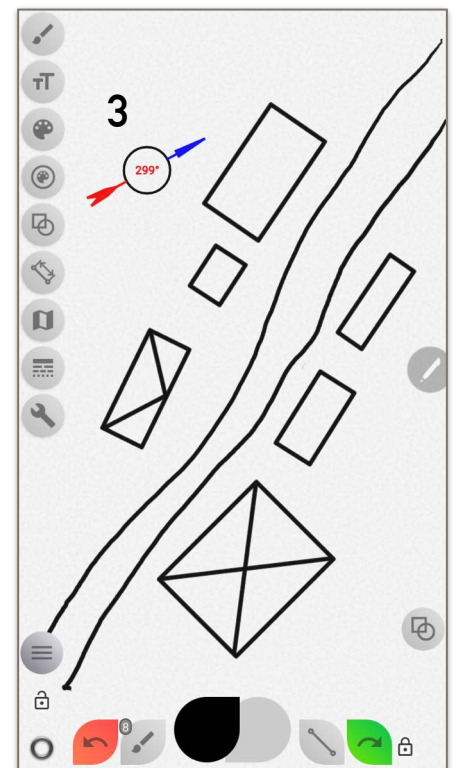
- A. Insert Compass view on drawing
- B. Close Compass toll.
- C. Scale.



1. Select Compass Tool



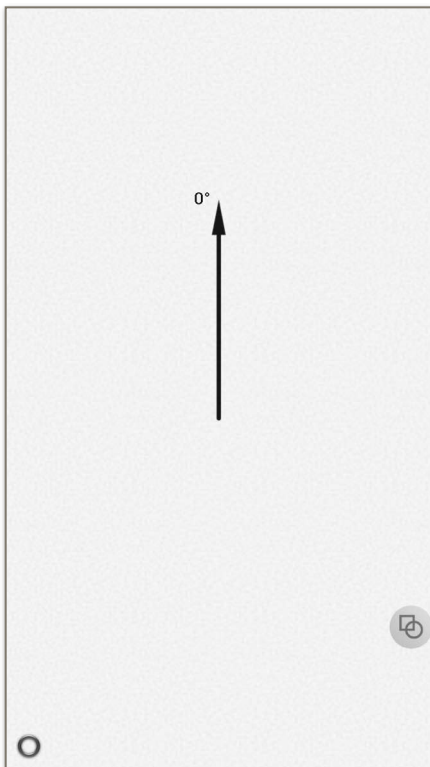
2. Orient device according to on site layout



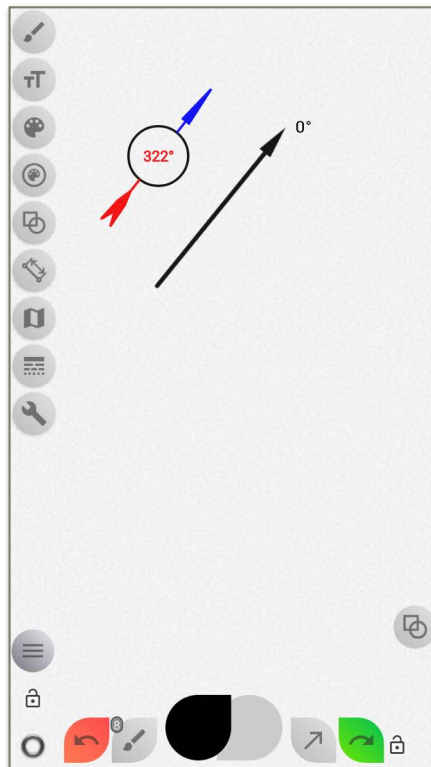
3. Insert view to drawing

3. Direction tool.

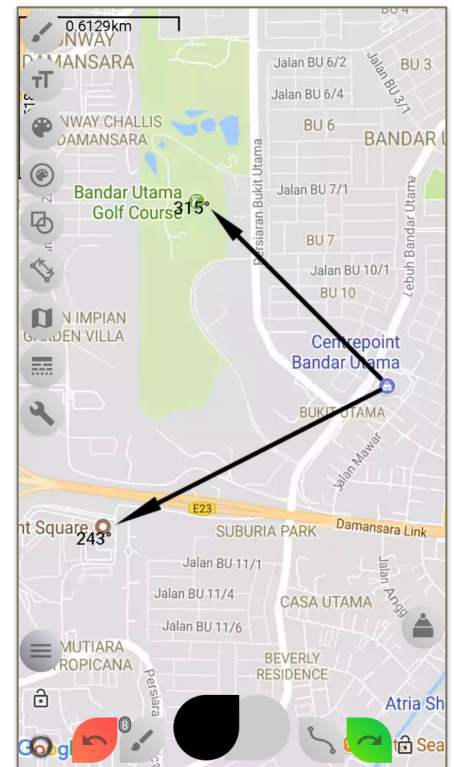
Aimed to help mention azimuths (*angle between North and on object directions*), if compass tool was used on drawing - it will automatically adjust values according to compass readings.



1. Normal case



2. Compass tool was used



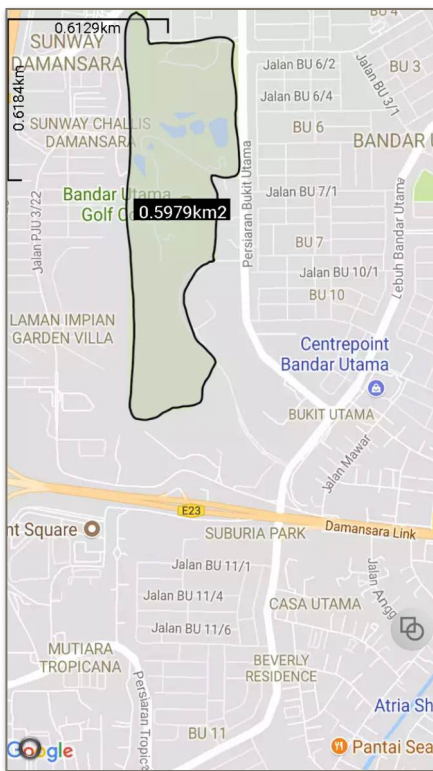
3. Project based on Google Maps (direction "up" is direction to North)

4. Odometer tool.



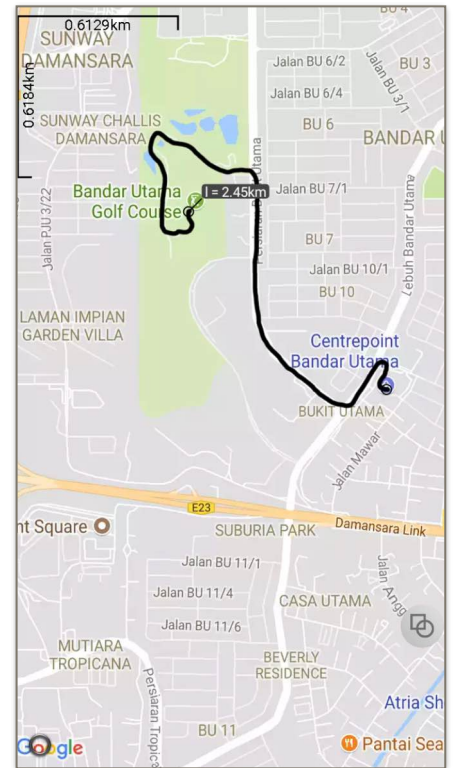
An **odometer** or **odograph** is an instrument used for measuring the **distance** travelled by a vehicle, such as a bicycle or car.

Simply follow path with your finger,
Sketch Box will count distance by it self.

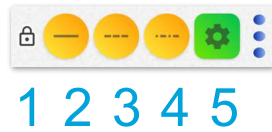


5. Area tool.

Aimed to help
calculated area
outlined on the
drawing.



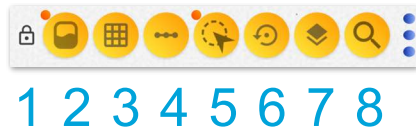
Line Style Menu



This menu will help control line style in Shapes Drawing mode. Currently 3 style are supported.

1. Lock Menu
2. Solid line
3. Dashed line
4. Dashed-Dotted line
5. Settings: help to change size of dash.

Tools Menu



All functions in this menu described in *”Tools”* section of this user manual.

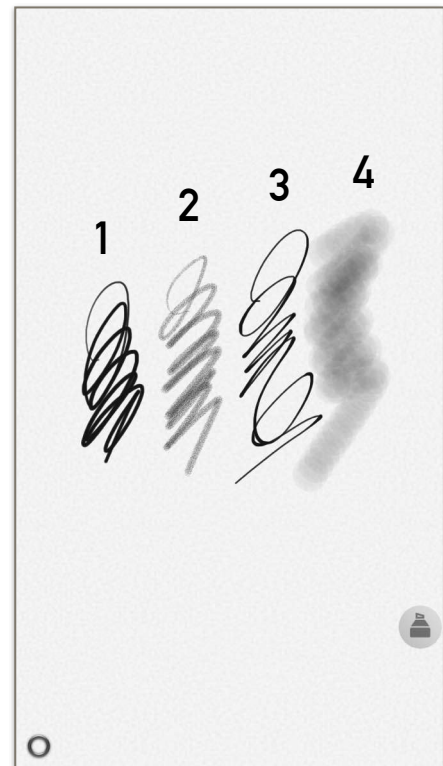
1. Lock Menu
2. Flood/Hatch
3. Grid
4. Drawing Scale
5. Selection
6. Rotation
7. Layers
8. View Scale

Brush Menu



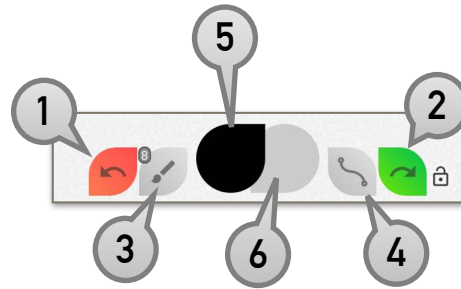
1 2 3 4 5 6 7

1. Ballpoint pen
2. Pencil (long click available - will open current pencil in “*Brush Redactor*”, please refer to “Brush Redactor” section of this manual)
3. Ink pen
4. Marker
5. Erases
6. Flood Fill Tool (long click for settings)
7. Hatching Tool (long click for settings)



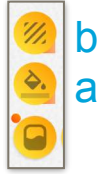
Status Bar

1. Undo
2. Redo
3. Fast Brush Menu
4. Current tool (shape selection on click)
5. Current Line colour (colour selector on click)
6. Current Fill colour (colour selector on click)

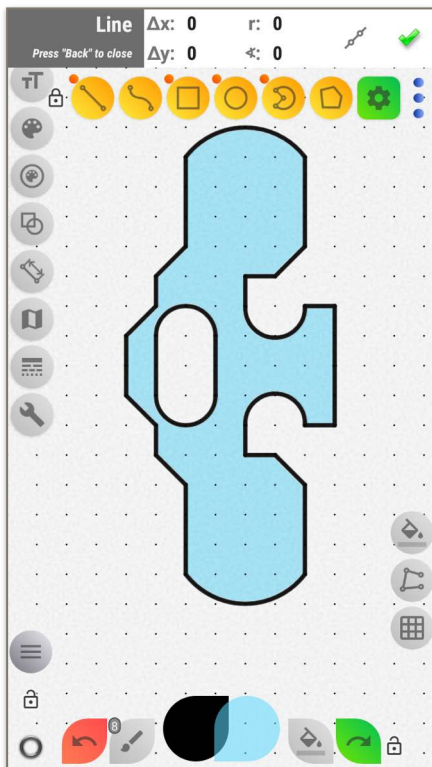


Tools

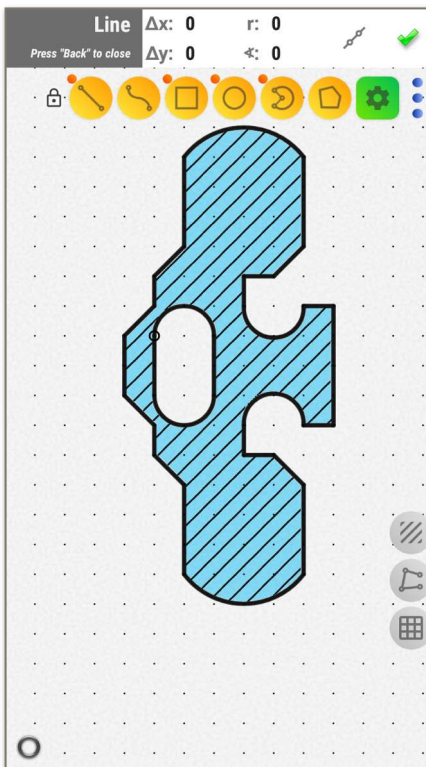
Flood Fill/Hatch



Flood fill and hatch tool aim to help to fast fill closed areas with solid colour or hatch. Both buttons long click will open settings. For Flood Fill you can change level of tolerance used to detect objects outline, and for hatch additional pattern selector.



a. Flood Fill



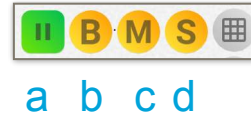
b. Hatch



c. Hatch Settings

Grid

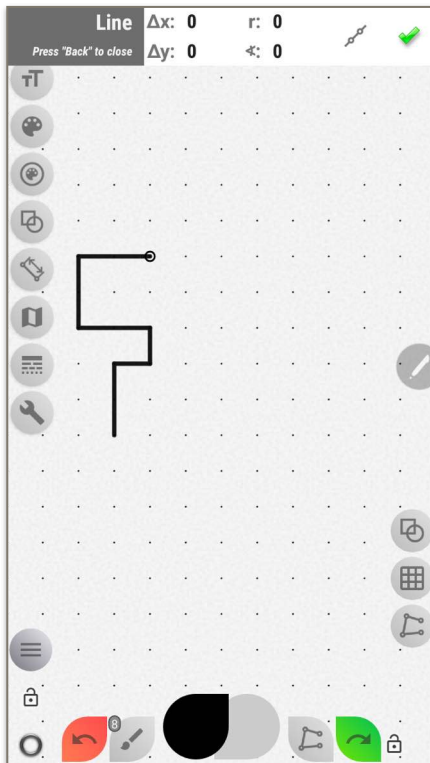
Grid tool aim to provide and facilitate snap to grid functionality. Grid settings allow to set 3 value of grid size for fast access menu:



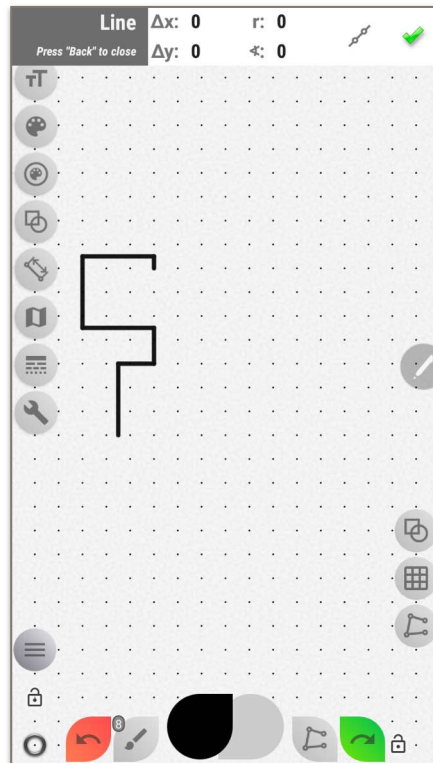
- Fast on/off grid.
- Big Size.
- medium Size.
- Small Size.



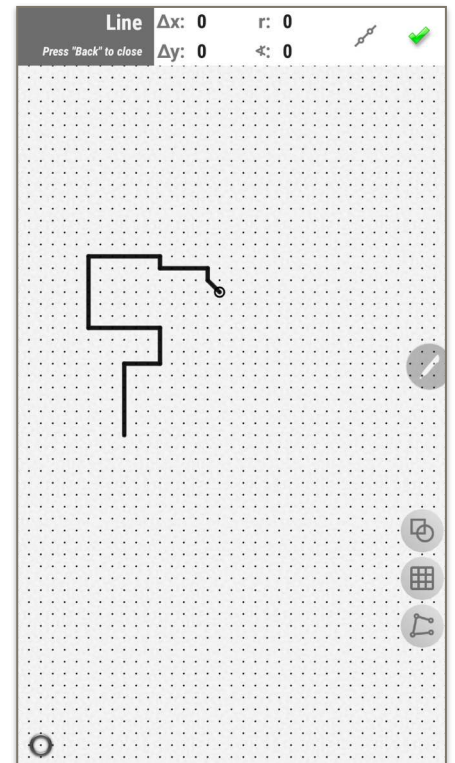
For easier shapes drawing, Set medium size 2 times smaller than big and small size 2 times smaller than medium, f.e 60, 40, 20.



a. Big size



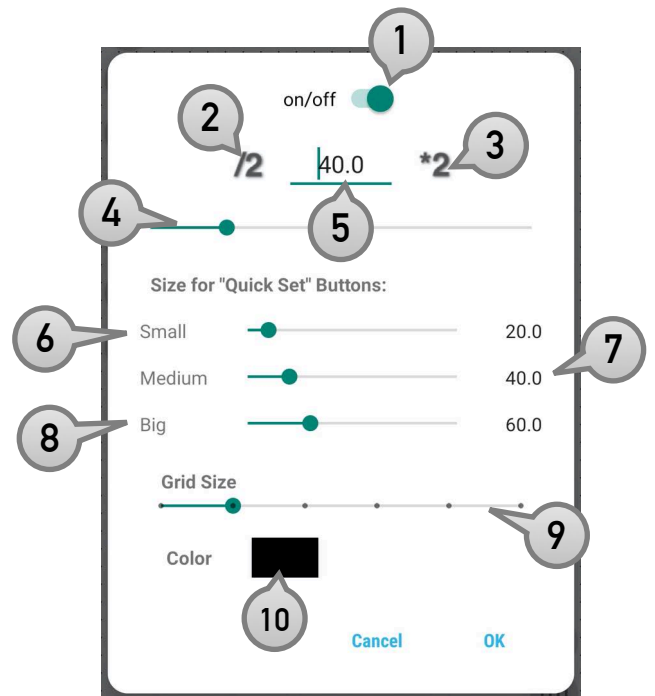
b. Medium size



c. Small Size

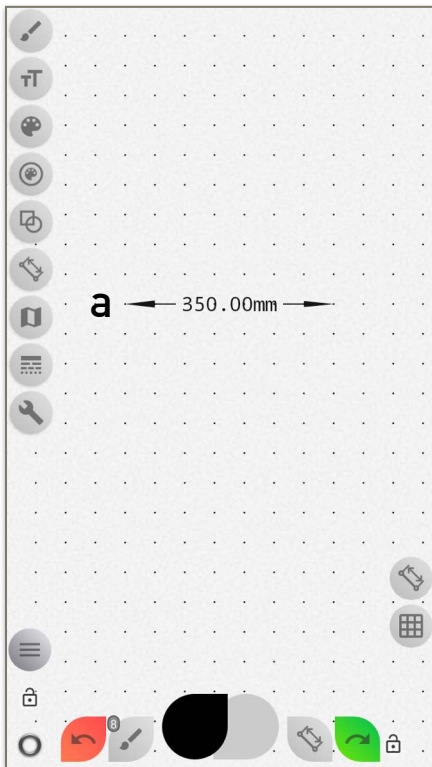
Grid Settings

1. Grid on/off.
2. Current size divide 2.
3. Current size times 2.
4. Size Selector.
5. Current Size Text Edit.
6. Small preset.
7. Medium preset.
8. Big preset.
9. Grid markers Size selector.
10. Grid markers Color selector.

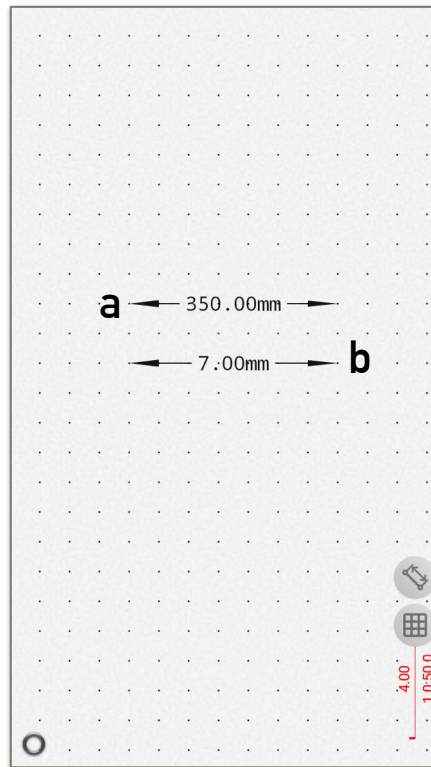


Drawing Scale

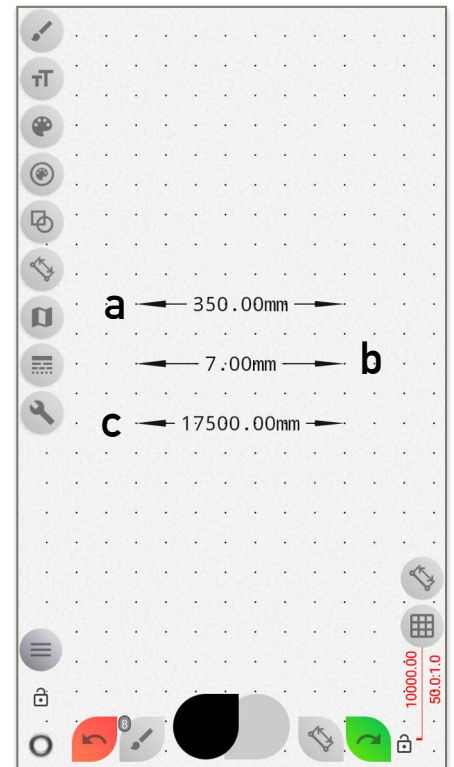
This tool will help to mention scale of drawing, f.e. here on this pictures dimension is used to measure same distance on drawing but with different drawing scale.



a. Scale 1:1

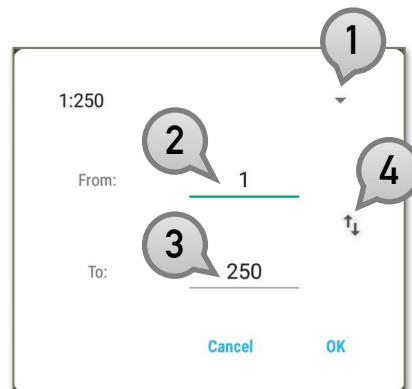


b. Scale 1:50



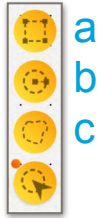
c. Scale 50:1

1. Scale preset selector.
2. Start value.
3. End value.
4. Invert.



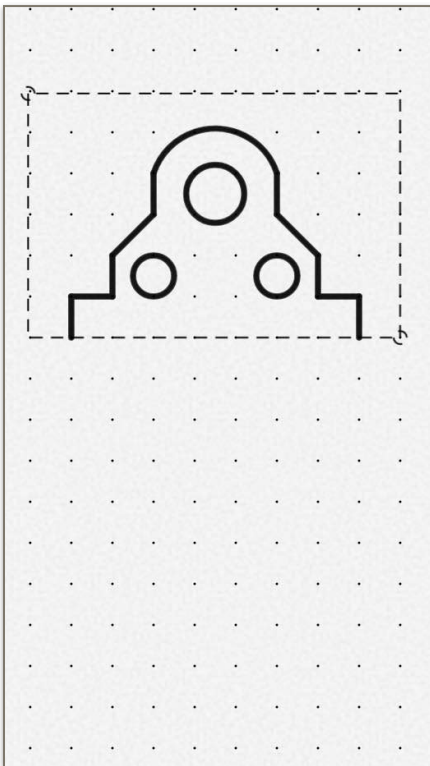
Selection (Copy tool)

Selection or Copy tool provide facilities for copy, cut, delete and reuse of parts of the.

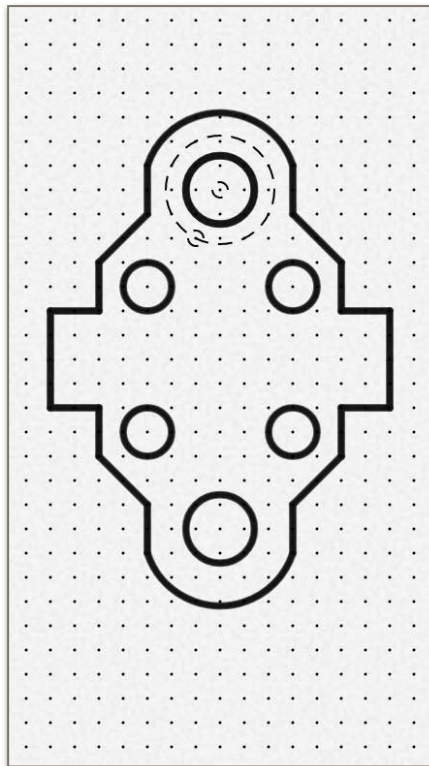


Sketch Box support 3 types of selections:

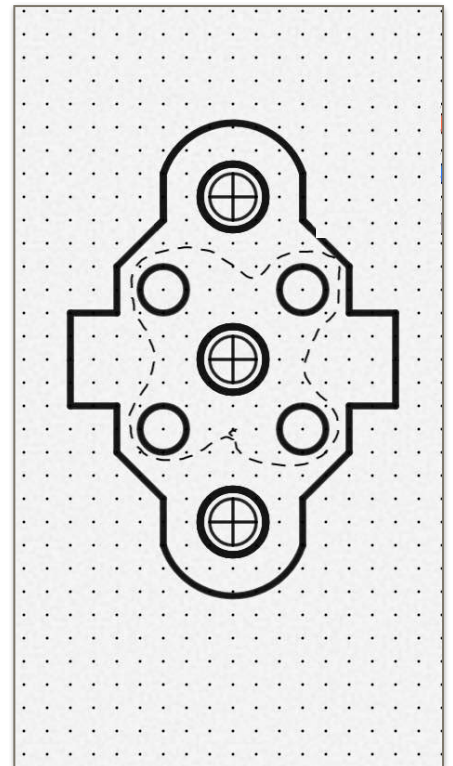
- a. Rectangular*
- b. Radial*
- c. Freehand*



Rectangular

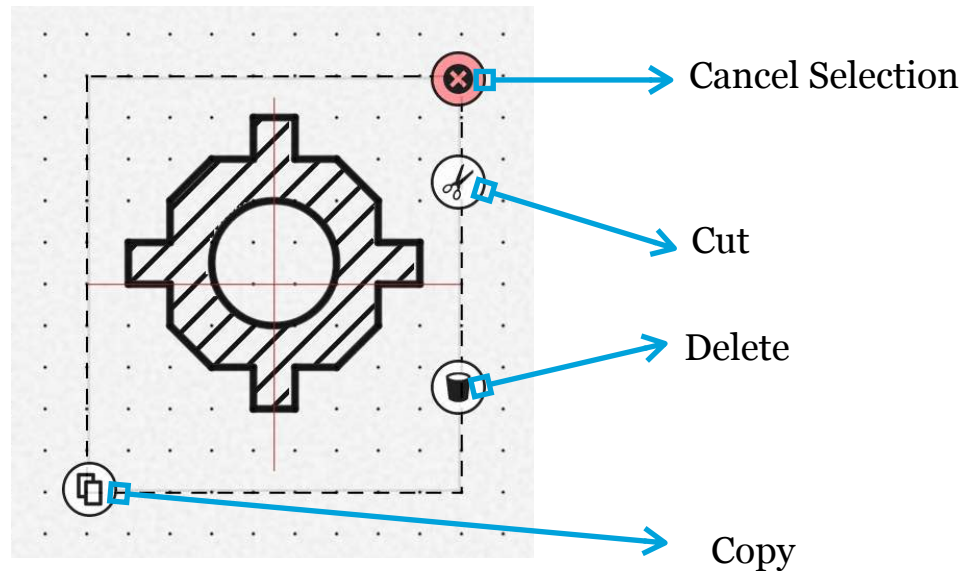


Radial

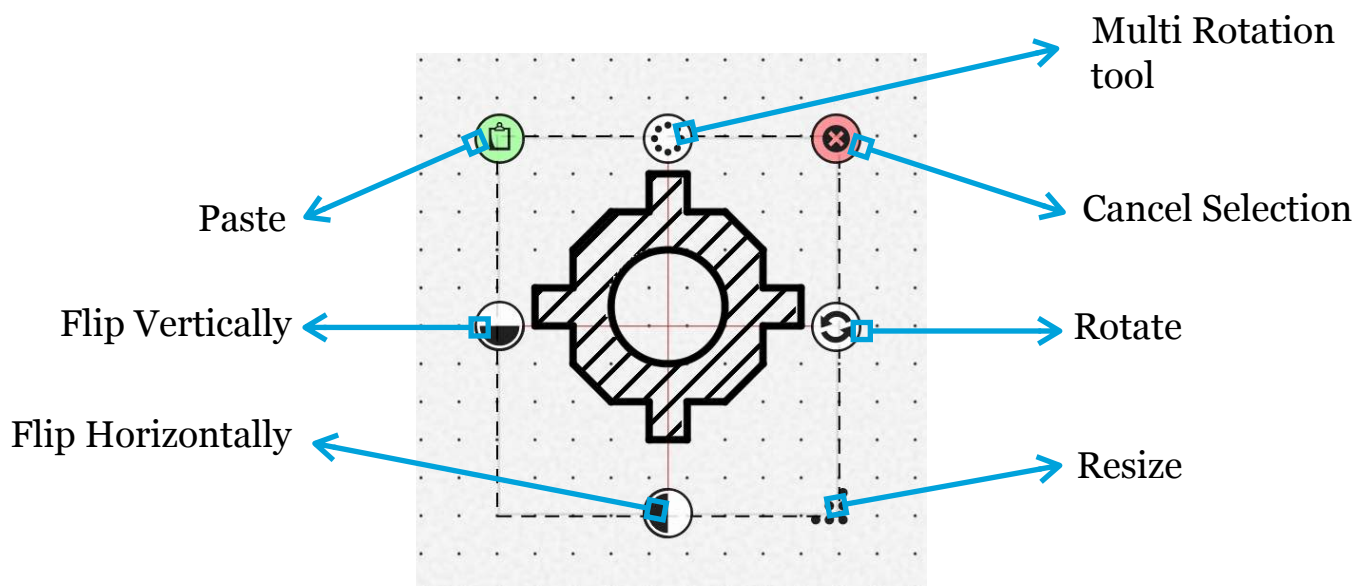


Freehand

Selection is done by dragging finger over desired area and releasing touch. Resulting selection will have controls as shown on picture below. You can select between copy, cut or delete function.

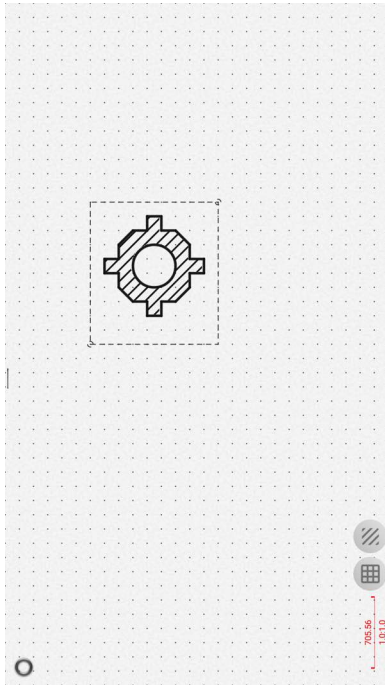


After pressing any corresponding functions button, controls will change to shown below.

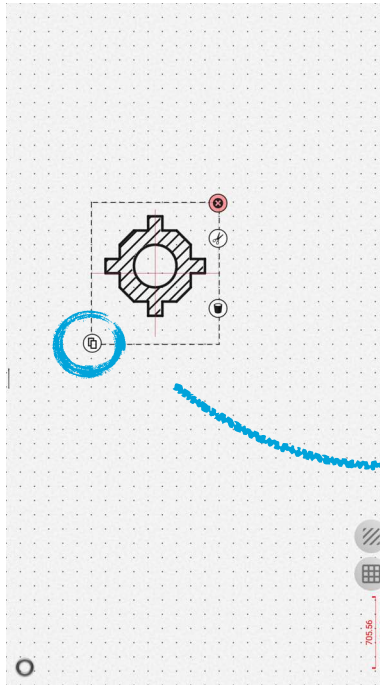


Workflow “Copy”

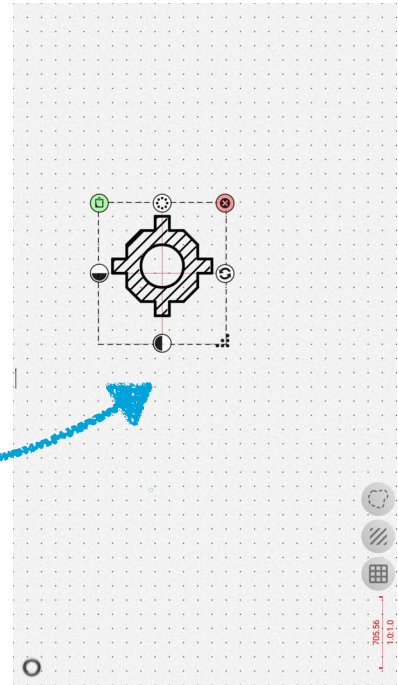
1. Make selection



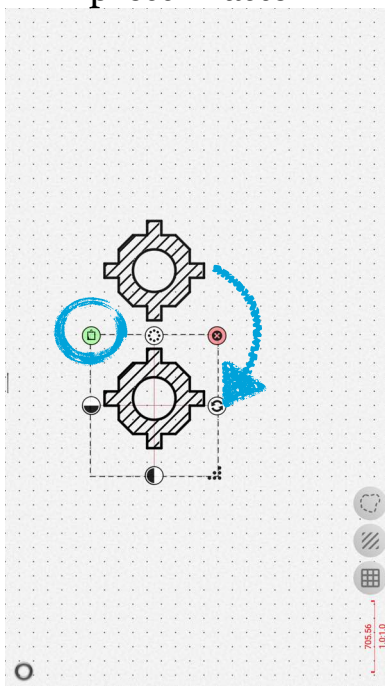
2. Press Copy button



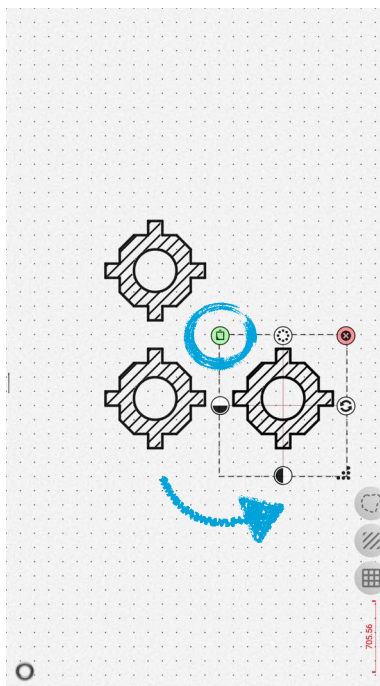
3. Copied selection



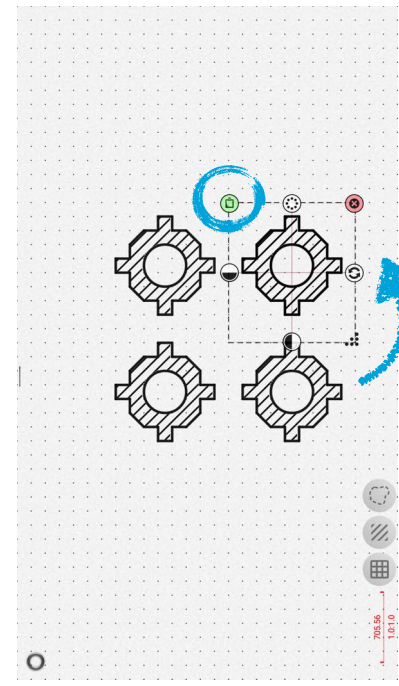
4. Move copied selection to position, press “Paste”



5. One more time

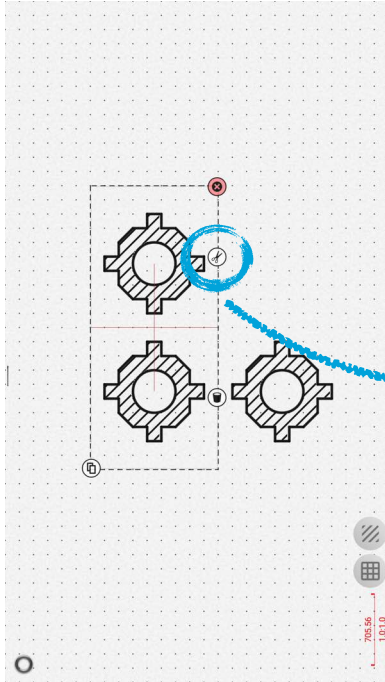


6. And one more

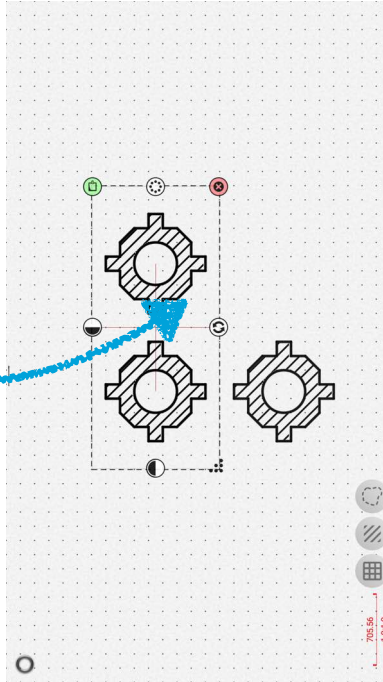


Workflow “Cut”

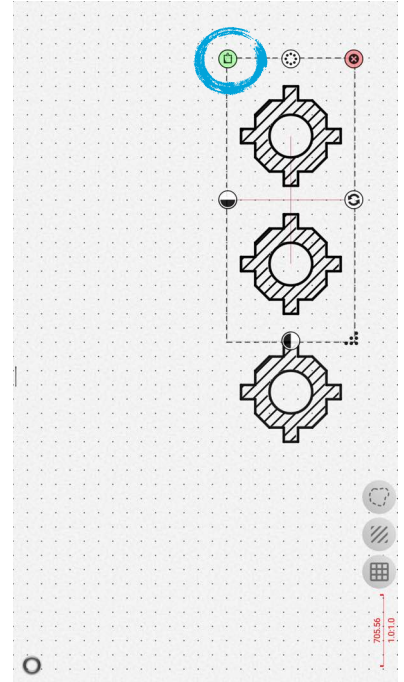
1. Make selection,
press “Cut”



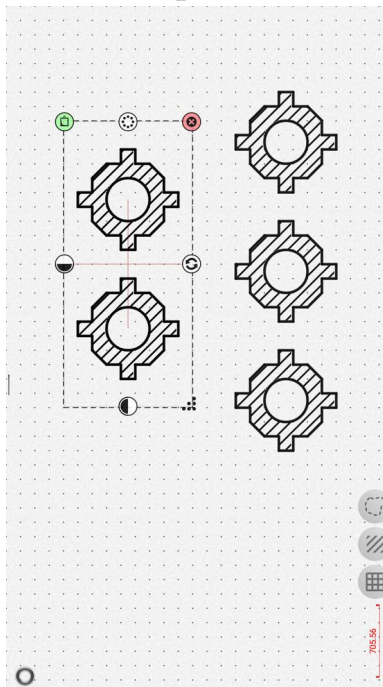
2. Result



3. Move selection to
position and
press “Paste”

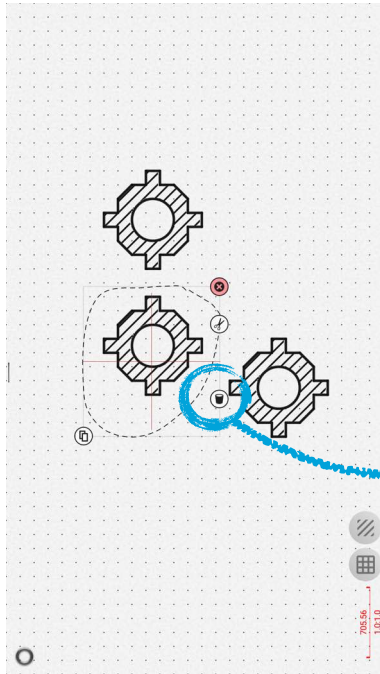


4. Paste again if
required

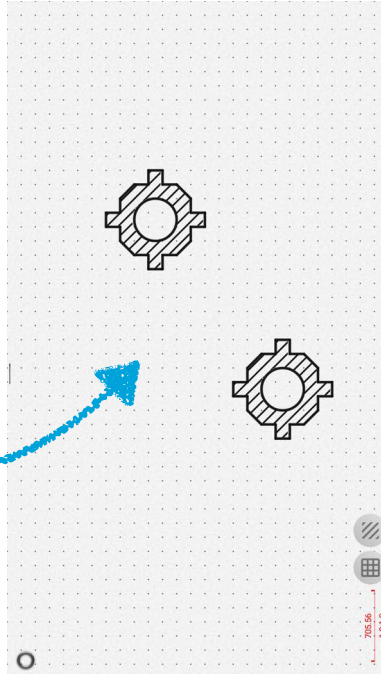


Workflow “Delete”

1. Make selection,
press “Delete”

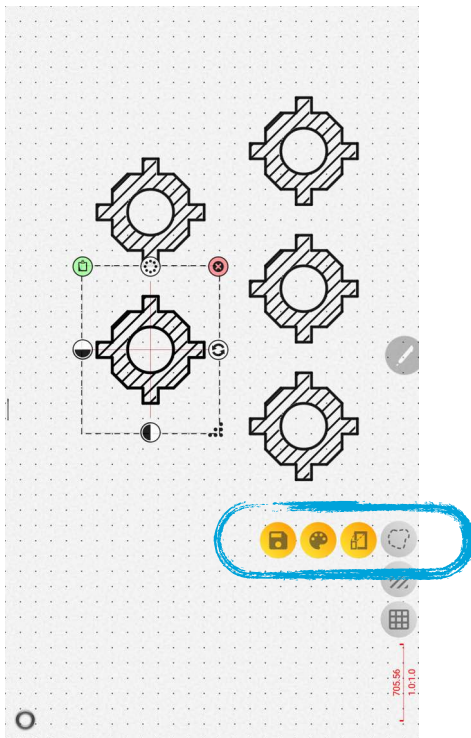


2. Result



Selection Context Menu

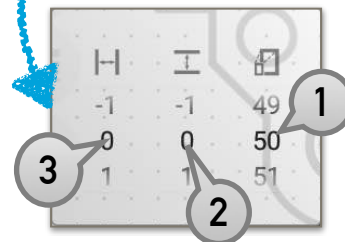
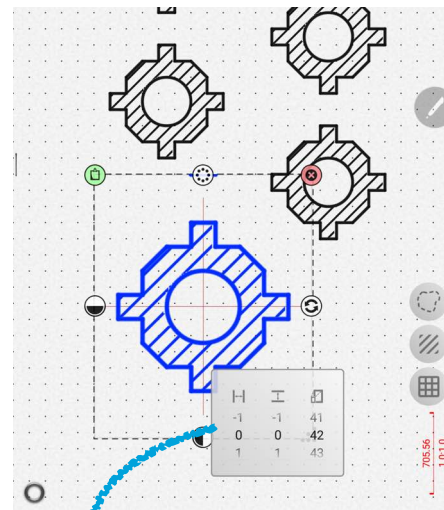
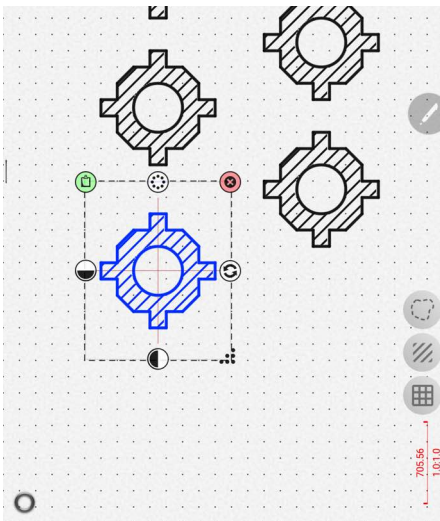
Every time selection is made context menu will provide additional functions:



Save Selection to device for later use

Resize Selection

Change colour of the selection



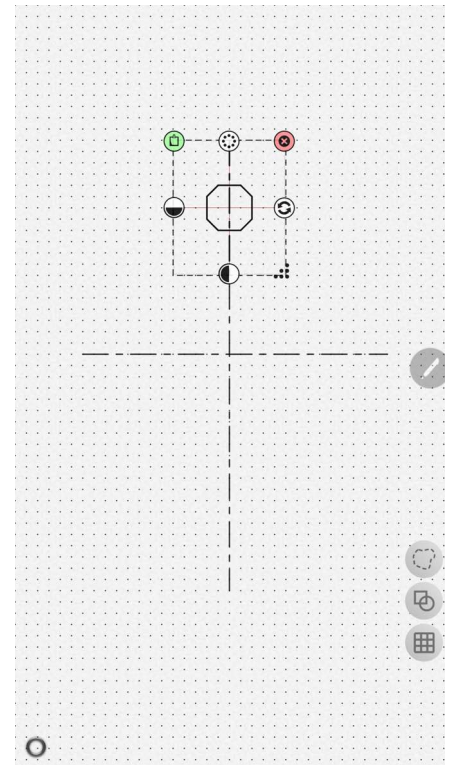
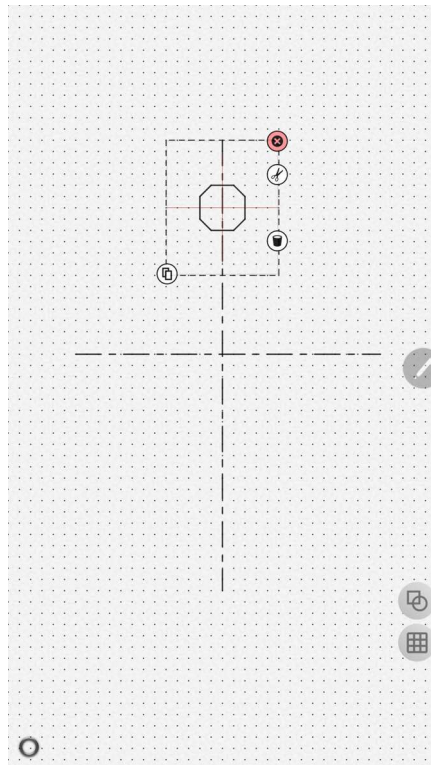
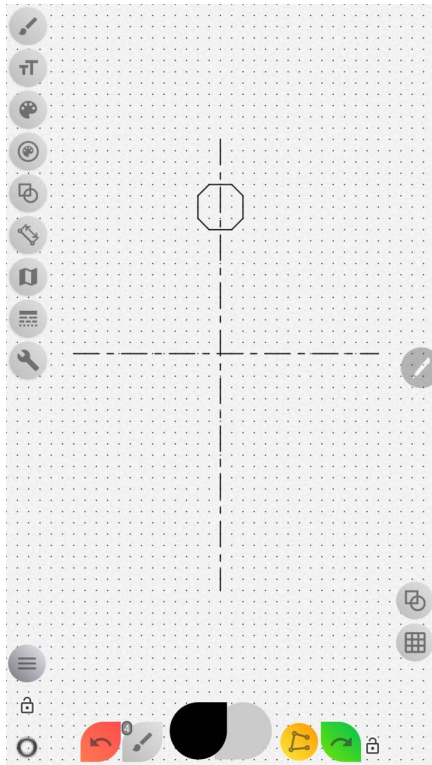
1. Scale Proportionally.
2. Scale Vertically.
3. Scale Horizontally

Selection Tool **Circular Pattern**

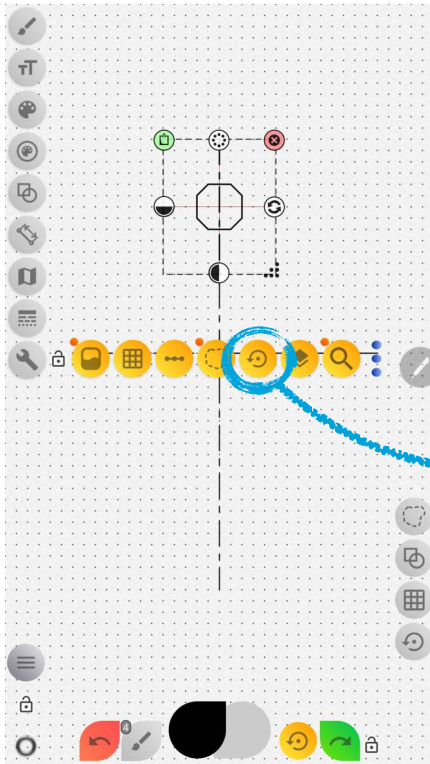
This function aim to help in situation when you need to paste selection repeatedly mentioned amount of times around rotation centre.

1. Select required area

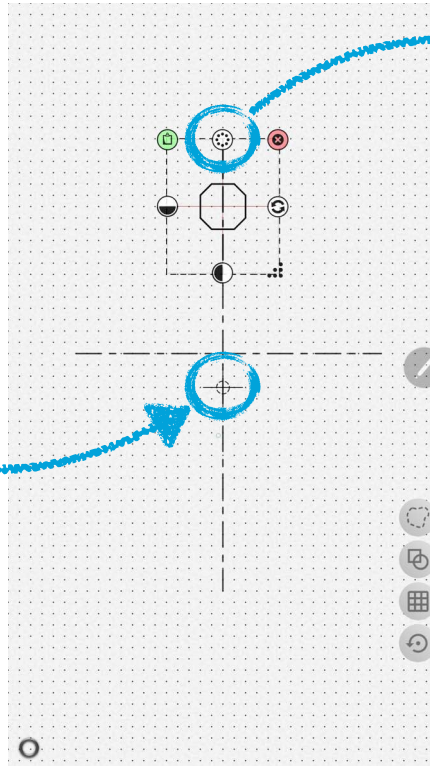
2. Press Copy button



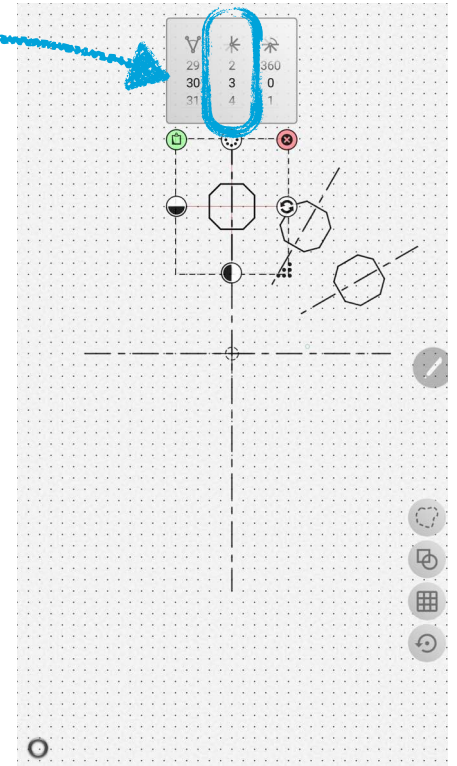
3. Select **Rotation** Menu



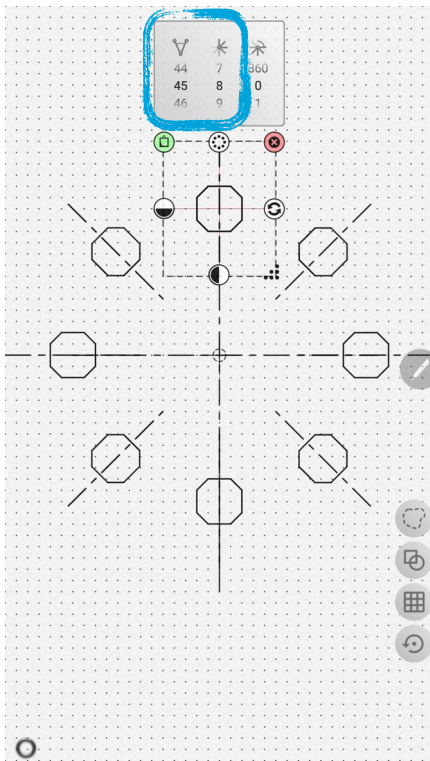
4. Press Circular Pattern button



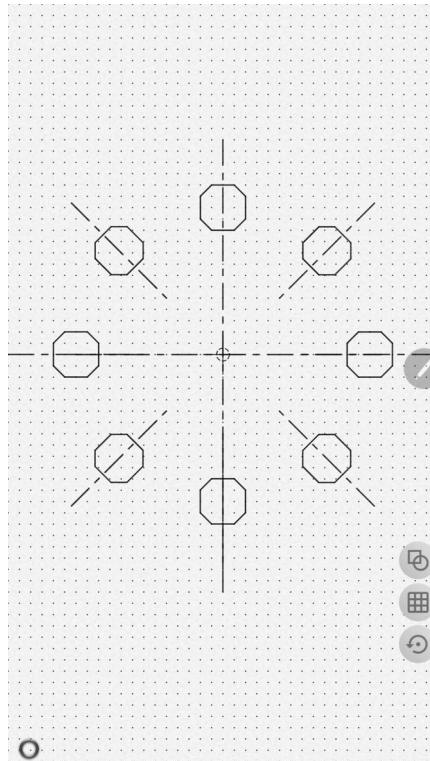
5. Adjust amount of copies



6. Adjust angle between copies



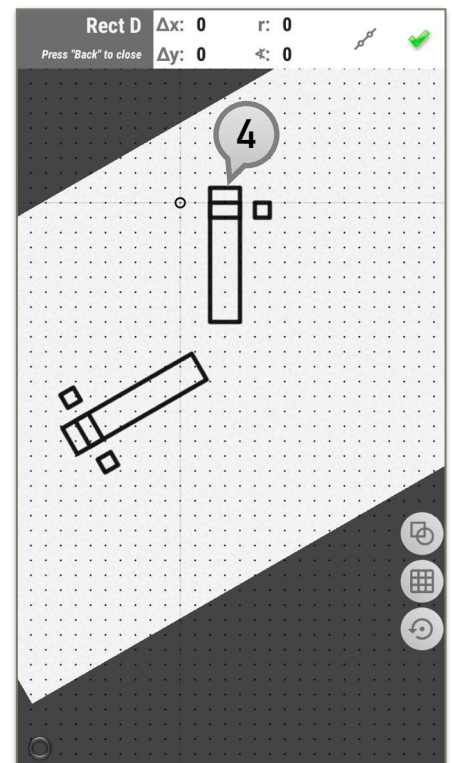
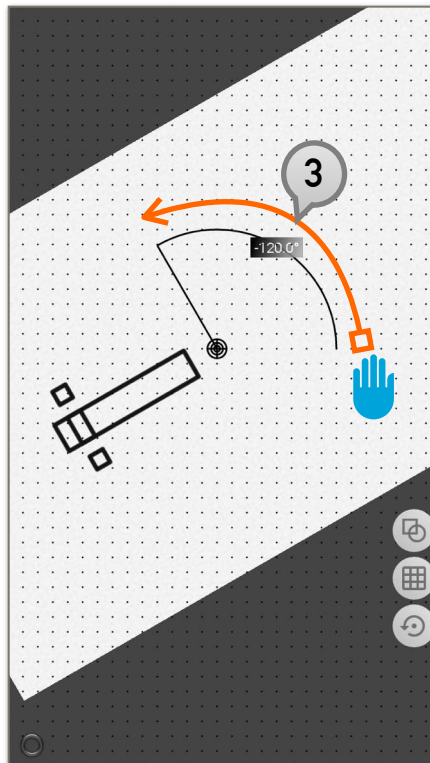
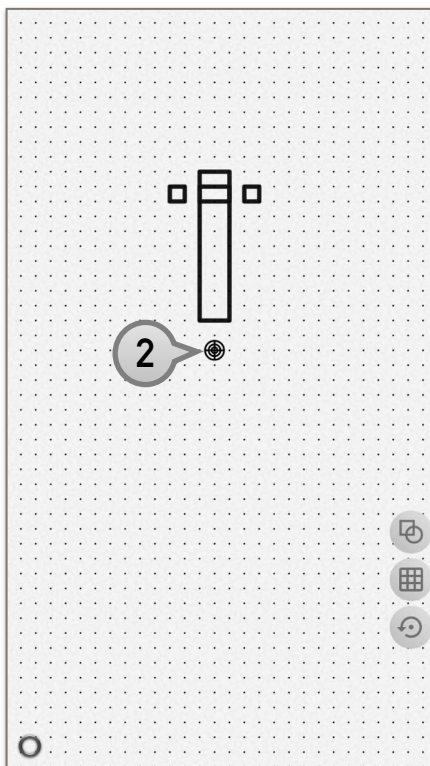
7. Press Paste button

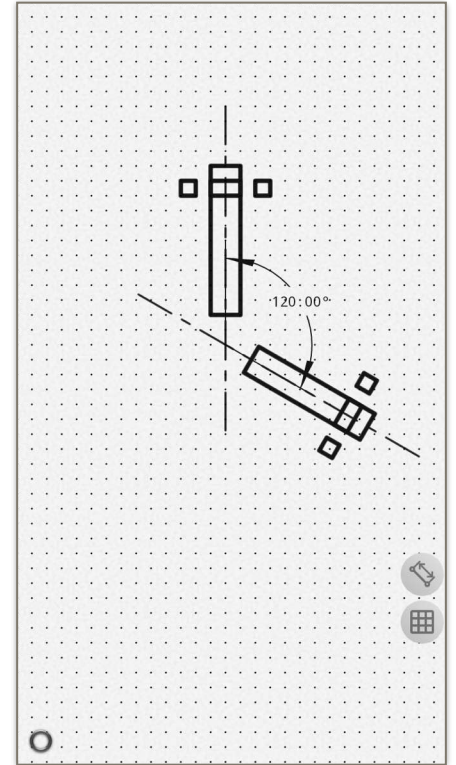
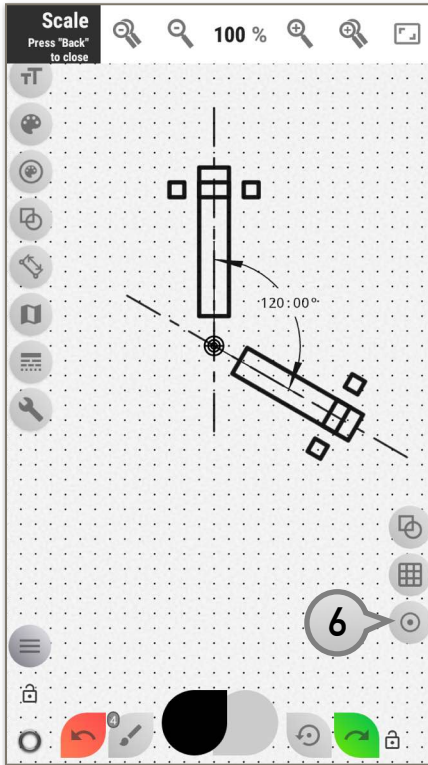
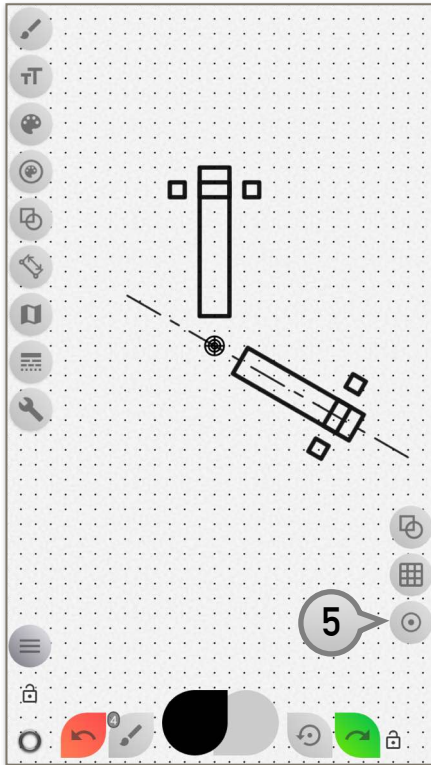


Rotation

Rotation tool aim to provide canvas rotation functionality. Rotation is performed around rotation centre which can be located anywhere on canvas.

1. Select Rotation tool from  Tools menu, it will put canvas into rotation state.
2. Move *Rotation Centre* into required position
3. Rotate canvas on required angle.
4. Continue to draw as it is vertical.
5. Click Rotation context button (first click will set angle to 0°).

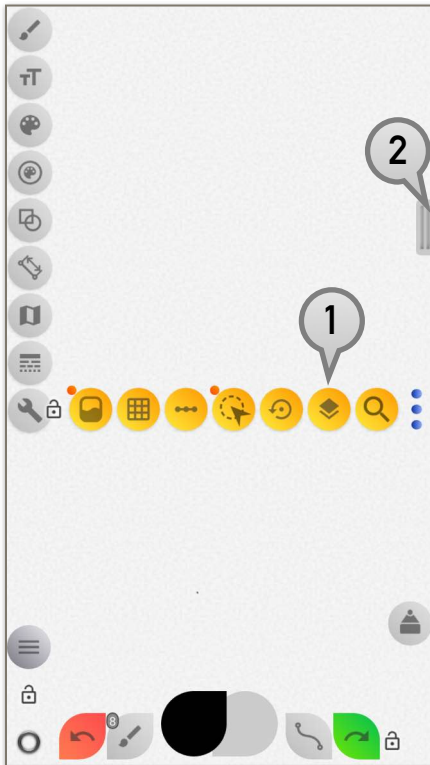




6. Click Rotation context button once more to close Rotation state.

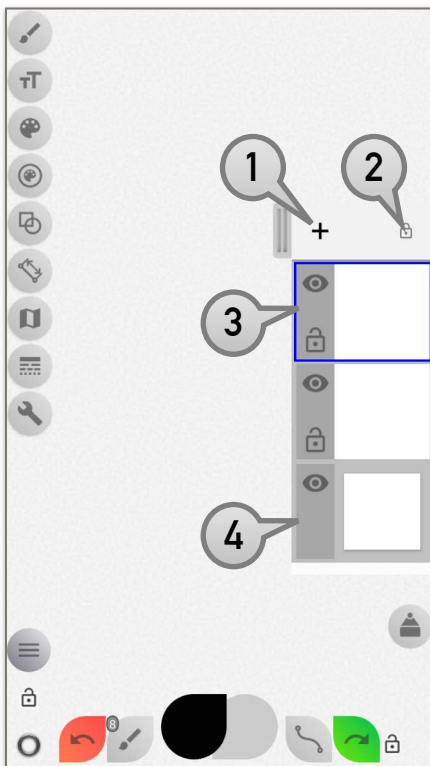
Layers

Sketch Box Free version support only one layer and Pro version - up to 6 layers.



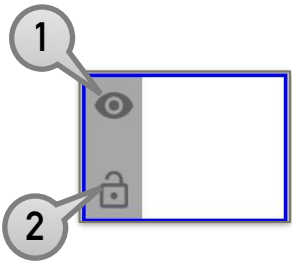
There are 2 ways to open Layers Drawer:

1. Use Layers buttons on *Tools Menu*.
2. Click on Layers Drawer handle left side on the screen. **This option available once you open drawer with menu.**



Layers Drawer:

1. Create New Layer.
2. Lock Drawer
3. Active layer (blue outlined), click any other later to make it active.
4. Background layer.



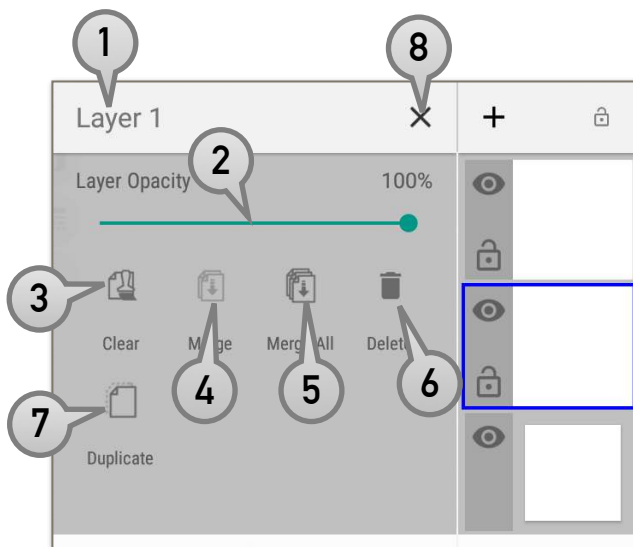
Here is a layer **drawer item**:

1. Control layers visibility.

2. Lock/unlock layer *(if layer is locked - it will not be possible to make any changes on it.)*

Long click on item will initiate Layer Edit state

Click on active layer will open layer menu.



1. Layer name Edit Box.

2. Layer Opacity Selector.

3. Clear layer.

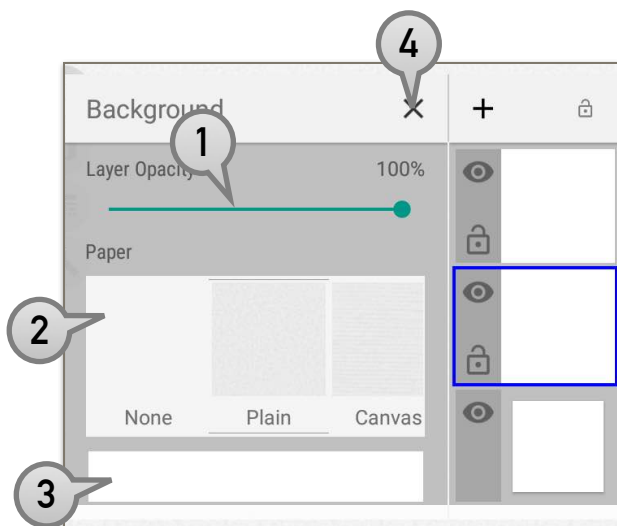
4. Merge layer Down.

5. Merge All layers.

6. Delete layer.

7. Duplicate layer.

8. Close menu.



1. Layer Opacity Selector.

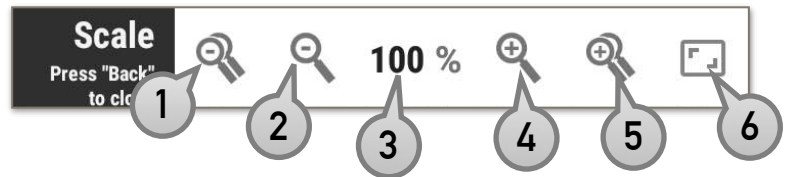
2. Paper (Texture) Selector.

3. Background colour selector.

4. Close Menu.

View Scale

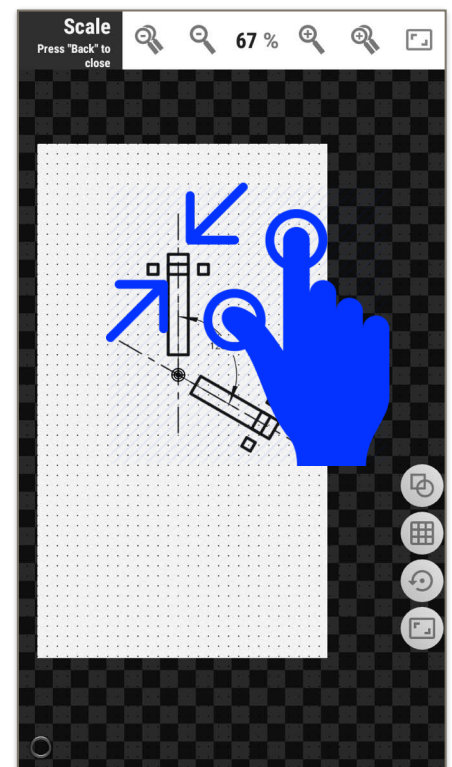
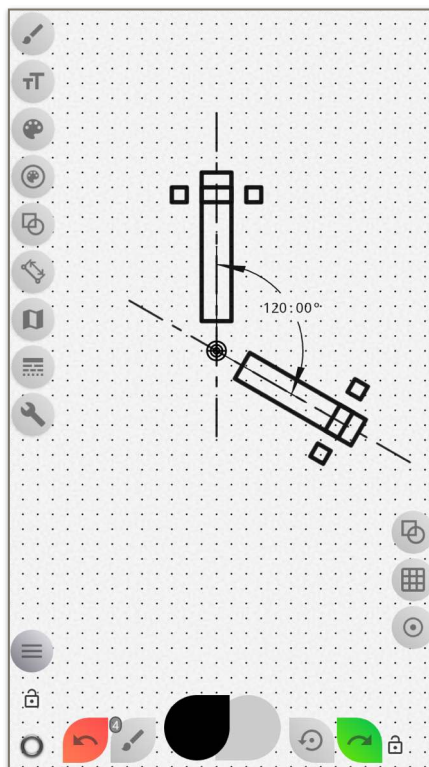
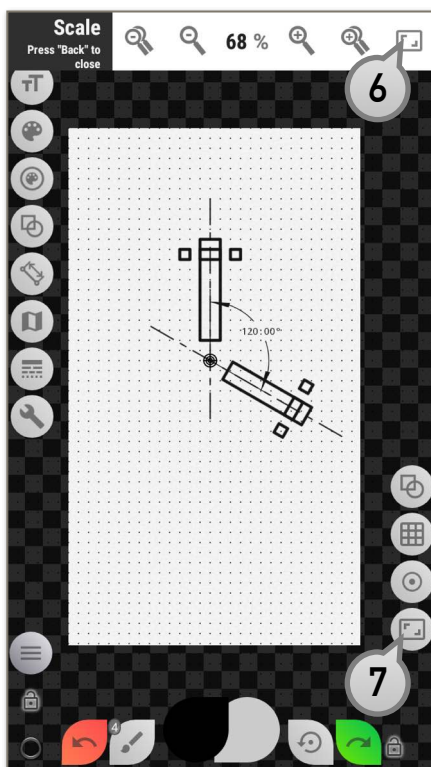
this tool can be useful in case when you need to scale view precisely by inputing scale value or using buttons on *Scale input bar*



1. Zoom out fast.
2. Zoom out.
3. Scale Input Box (for instant value input).
4. Zoom in.
5. Zoom in fast.
6. Reset Scale.

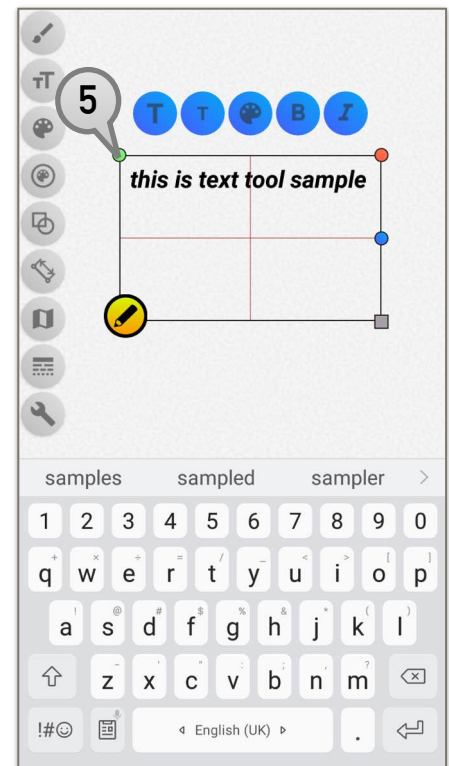
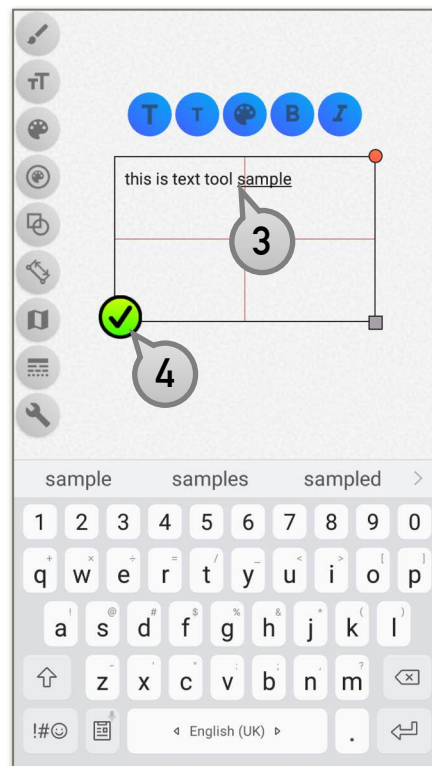
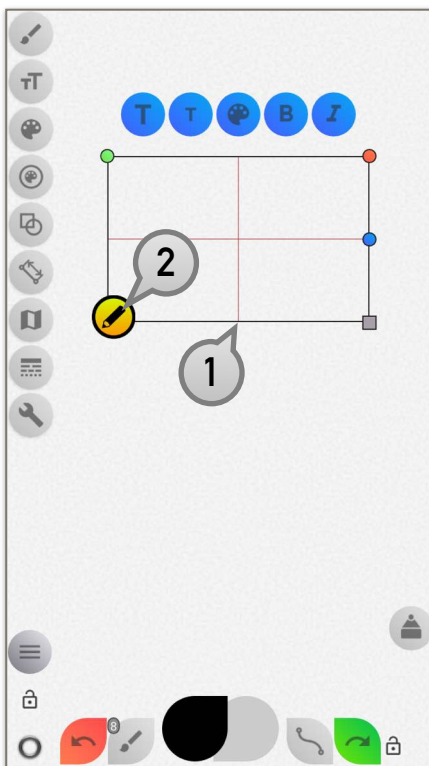
Reset Scale also available from *context menu bar (7)*.

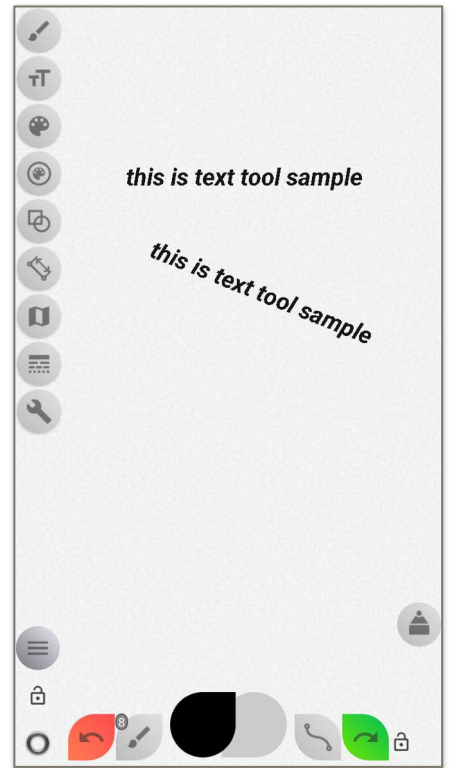
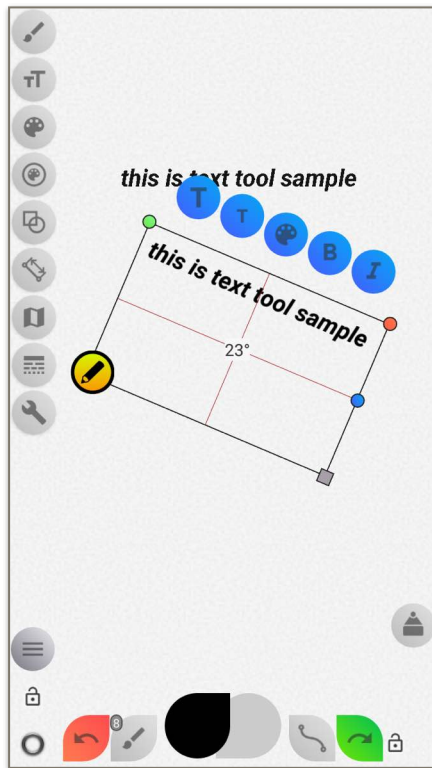
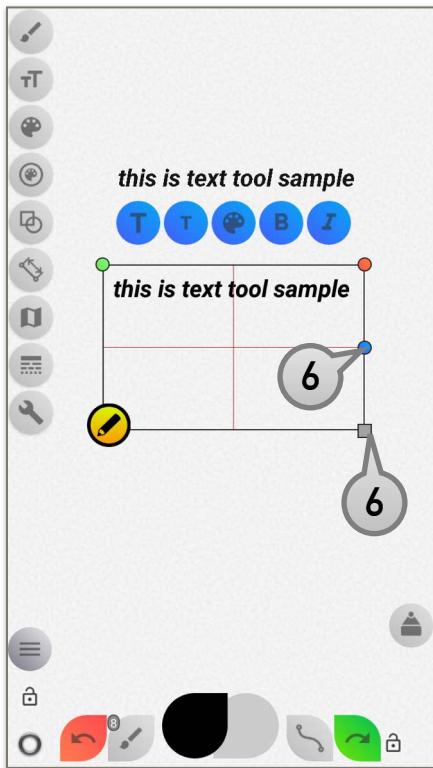
Drawing scaling can be done by fingers right on the canvas.



Text

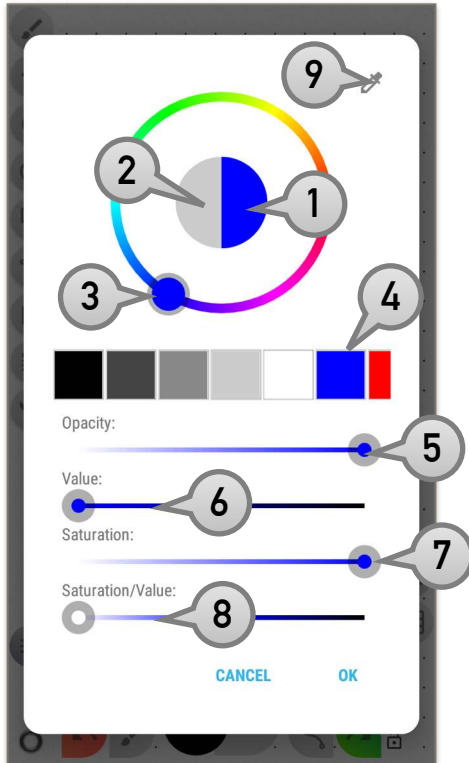
1. When you select Text Tool from tools panel it will open text container.
2. For text input you need to click edit button.
3. Input text.
4. Click Accept Button
5. Click Paste button
6. Text container can be rotated or scaled by using corresponding buttons.





Custom Color

At the moment Sketch Box support HSV (Hue, Saturation, Value) colour map, here is Custom colour selection window:



1. Selected Colour
2. Previous Colour
3. Hue selector
4. Colour History bar
5. Opacity selector
6. Value Selector
7. Saturation Selector
8. Saturation/Value Selector
9. Pick colour from canvas