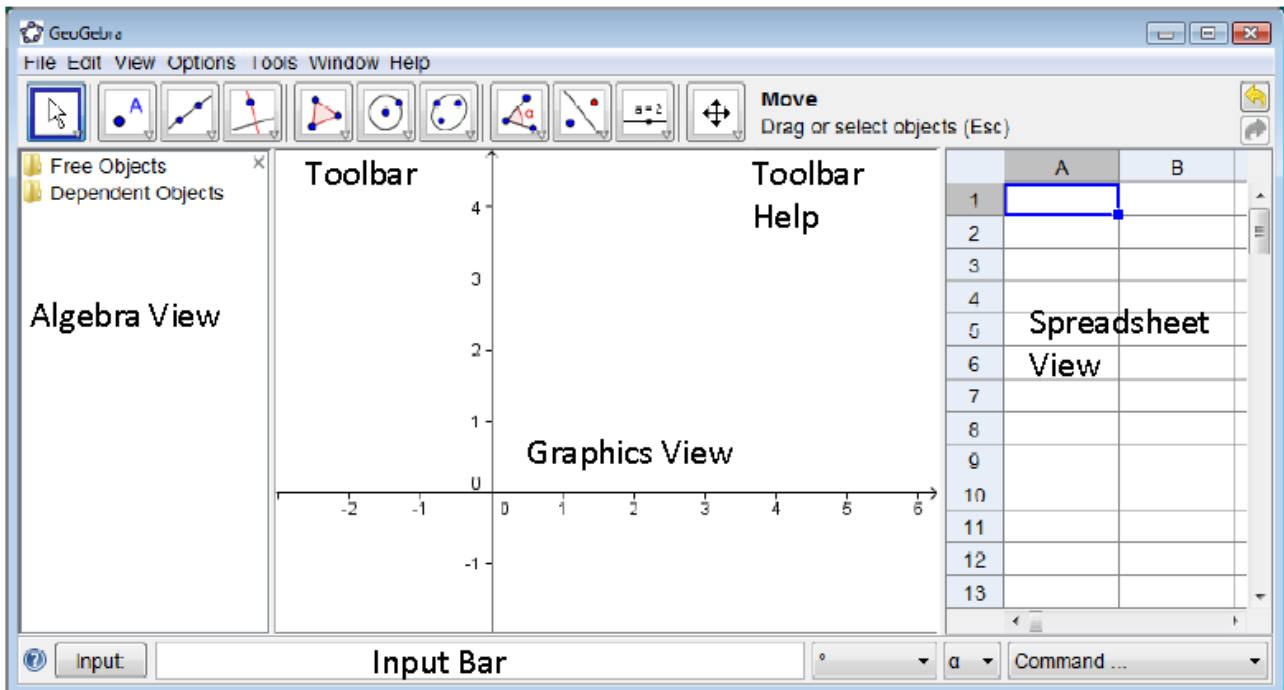


INTRODUCTION TO GRAPH DRAWING WITH GEOGEBRA

Introduction – display image

It is smart to learn the names of the different screen-areas, since they are widely used in GeoGebra Manuals. This is an image from the official manual:



Drawing graphs

The procedure is similar for all types of functions. First write the desired function expression in the input bar. Then, change the axes so that the graph show up in the graphics view.

We will now draw the graphs of the to following functions:

1. The straight line given by $f(x)=3x+1$
2. The quadratic function $g(x)=3x^2-2x+2$

1. The straight line $f(x)=3x+1$

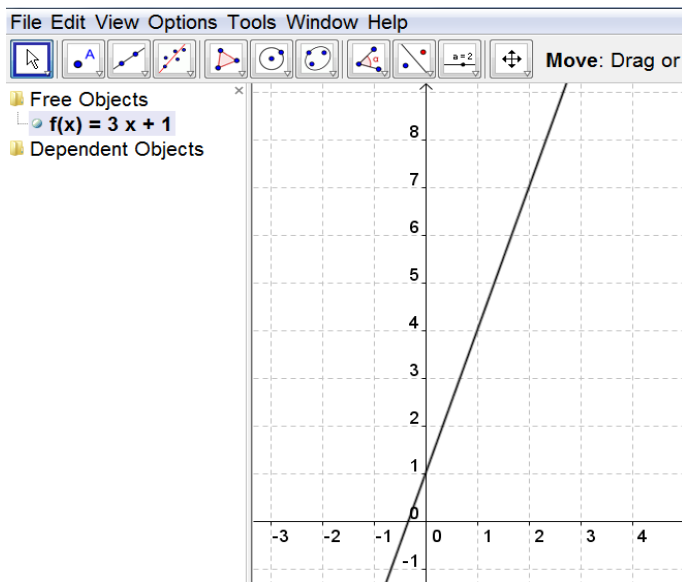
In the input bar, type $f(x)=3x+1$.



$f(x)$ is the name of the function f of the independent x . We can of course provide other names for the function like $g(x)$, $h(x)$, $k(x)$. Note that we do not need the multiplication sign between 3 and x .

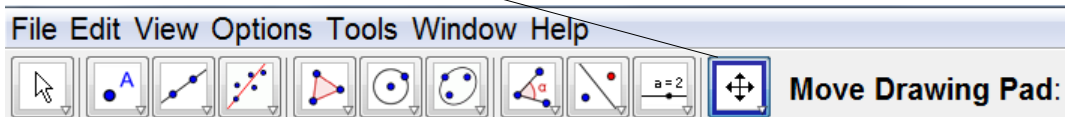
Press enter and the graph of the function will appear:



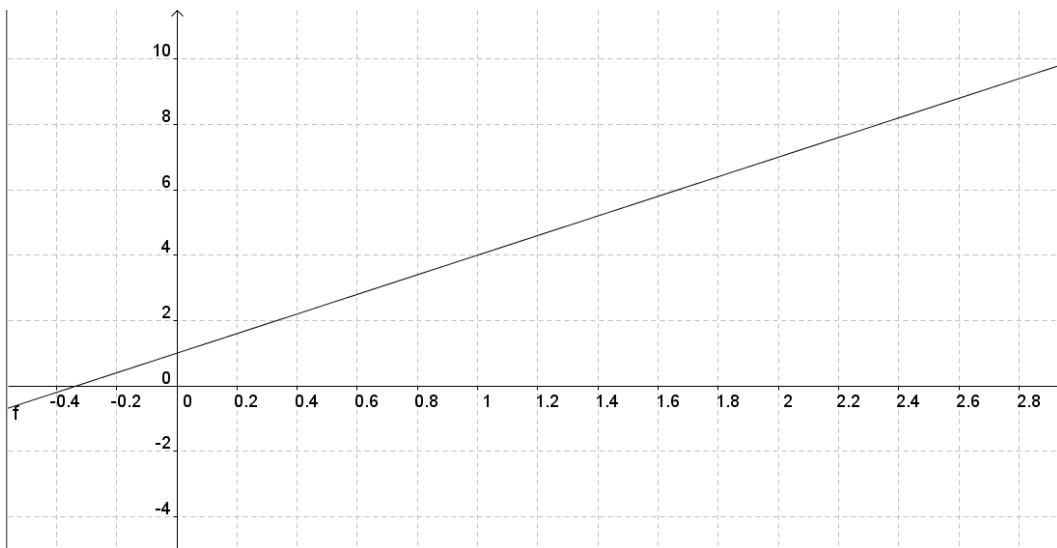


Adjusting the x- and y-axis:

To get the best possible picture of the graph, we need to adjust the x- and y-axis. For this we use the Move Drawing Pad:



Press this button so that it is highlighted. Move the cursor so that it lies directly over one of the axes. Press left mouse button and drag the axis to change the units. Try to make the drawing pad look like this:

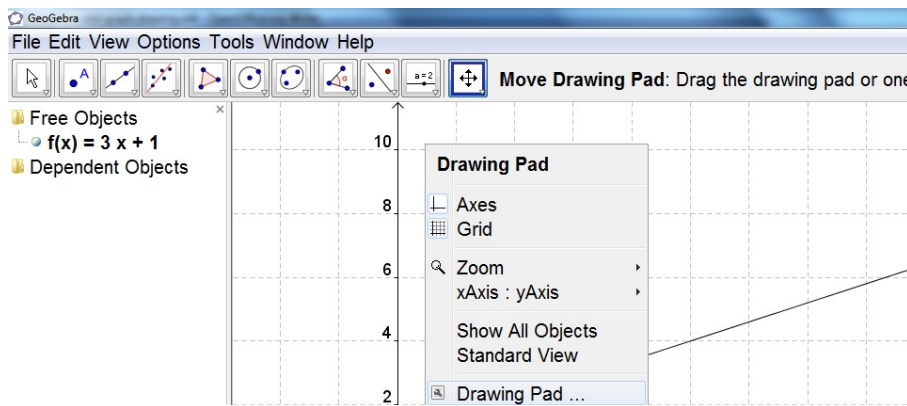


More editing in the graphic view

The graphic view and all objects drawn in it are editable. Find a empty spot and press the right mouse button. The following menu will show.

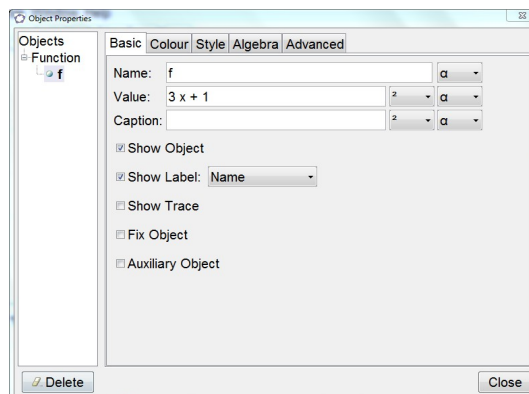
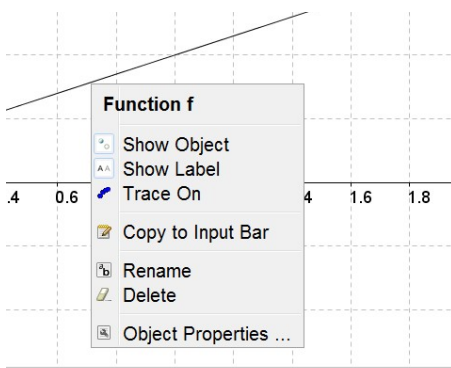


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Select Drawing Pad to adjust axes, grid etc. Try it out!

Right click on an object in the graphic view and choose Object Properties for more editing choices on already drawn objects:



Try out the different choices!

2. The quadratic function $g(x) = 3x^2 - 2x + 2$

This one is made exactly the same way as the previous function. Type $g(x) = 3x^2 - 2x + 2$ and press enter. Adjust the axes to make the graphics view look like this:

