Plotting Curves

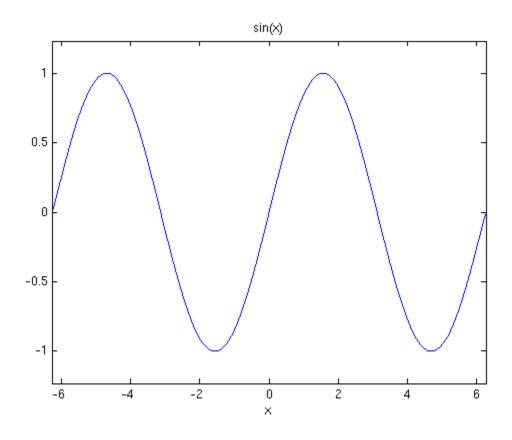
Table of Contents

Using ezplot	1
Changing the Window Size	
Equations	3
An Alternate Command	4

Using ezplot

A picture is worth 1000 words. Let's learn how to get Matlab to show us some graphs. The easiest way is to use a command called ezplot. Suppose you want to draw the graph of the function $f(x) = \sin(x)$ over the interval from -pi to pi. Try typing the following command:

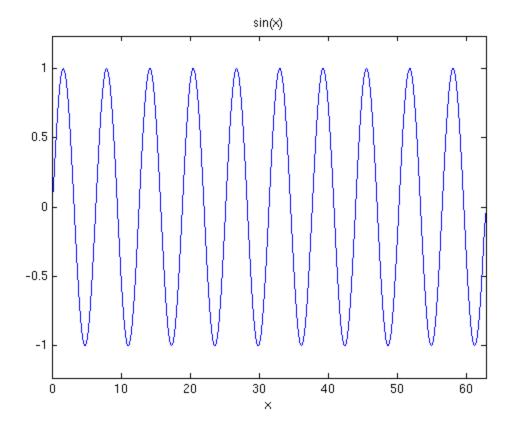
```
syms x
ezplot(sin(x))
```



Changing the Window Size

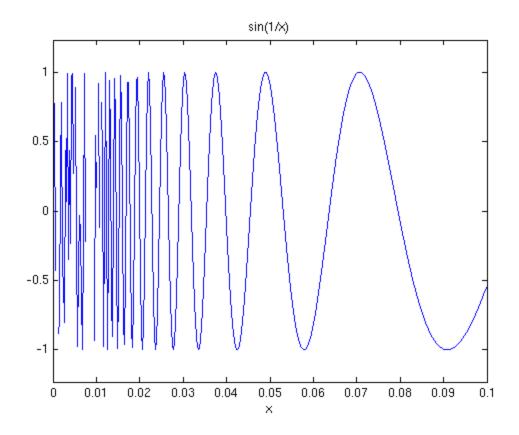
Matlab tries to make a reasonable choice of how much of the function to show. It often gives quite a good result. If you prefer you can tell it what domain to plot.

ezplot(sin(x), [0, 20*pi])



How about this one:

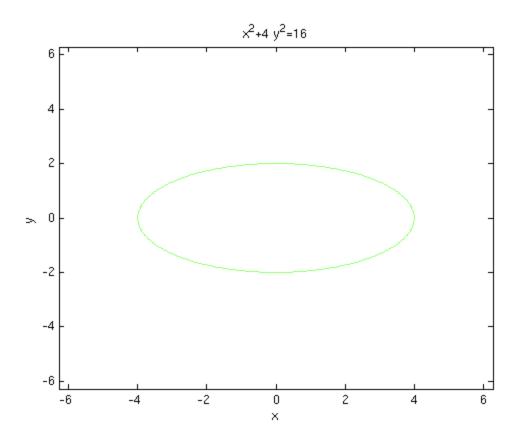
ezplot(sin(1/x), [0, 0.1])



Equations

Just so you know, ezplot can do equations, too.

```
syms x y ezplot('x^2+4*y^2=16')
```



An Alternate Command

There is an alternative function called plot that gives you much more flexibility and options with your graphs, but it is a bit more advanced. If you'd like to learn about plot, try reading the Matlab help entry. For now, ezplot is all we'll need.

Published with MATLAB® 8.0