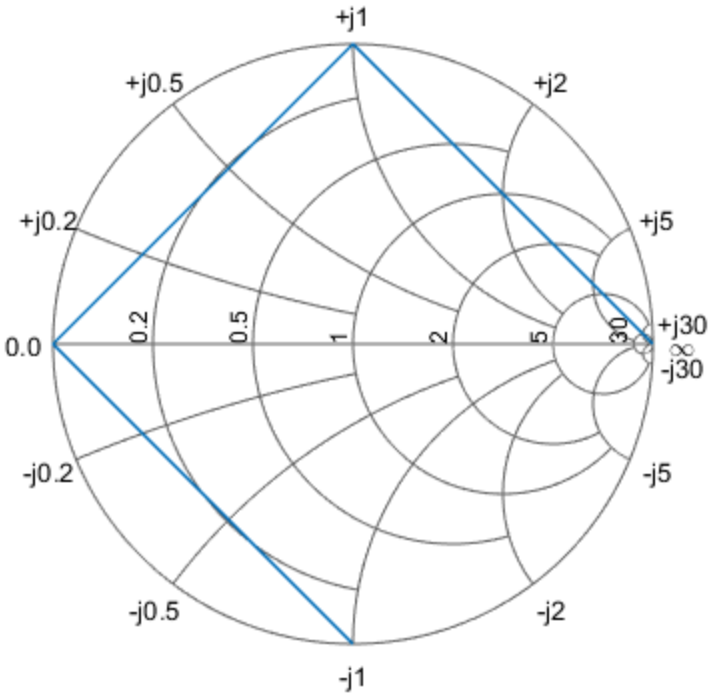
Smith Chart Plotting Demo

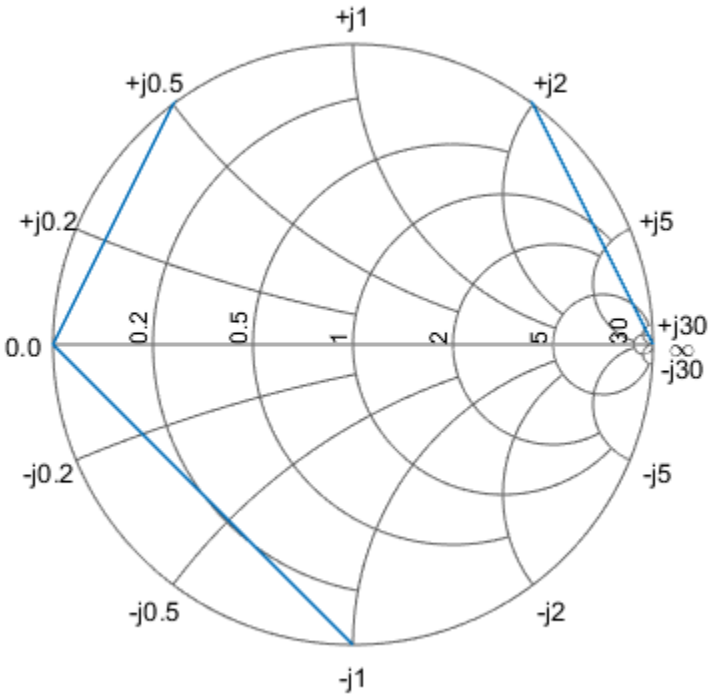
The command 'smithplot' is the basic plotting command required for plotting on the smith chart. Although not explicitly states in the documentation (as far as I can see), when used as 'smithplot(freq, data)' the data being plotted are reflection coefficients, not impedances.

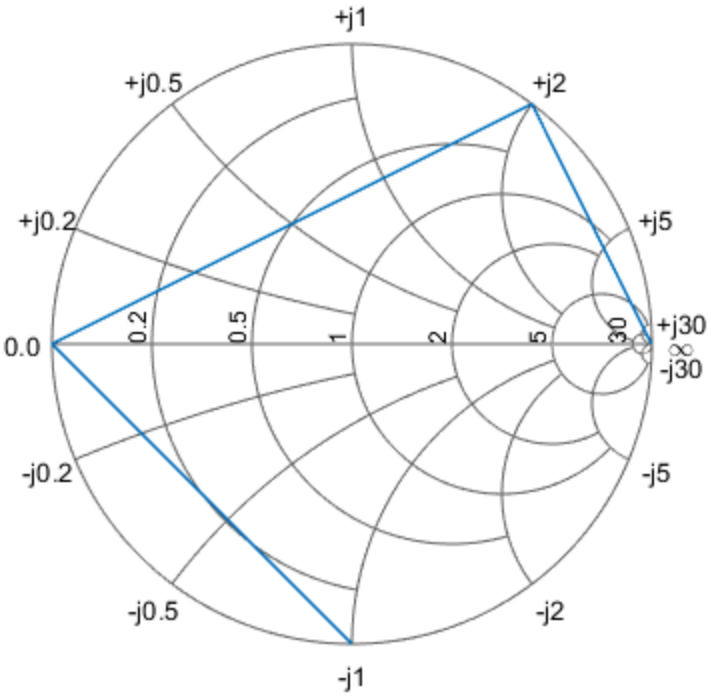
Using the command 'refl()' included in MSTD, you can convert from impedances to reflection coefficients.

Here's an example:

```
% Plot based on gamma - we'll use 1, i, -1, and -i to hit all four
% extremeties.

% Simple smith chart plot
figure(1);
smithplot([1,2,3,4], [1, i, -1, -i]);

% Now to move the vertex at +j1 to +j2, the following command does NOT
 work
figure(2);
smithplot([1,2,3,4], [1, 2*i, -1, -i]);
% This is because it's putting a vertex off-screen at a point twice as
% 'high' as +j1.

% To move the vertex to the point marked on the smith chart as +j2, we
 need
% to use an impedance plot, as shown below:
figure(3);
smithplot([1,2,3,4], refl( [1000, 2*j, 0, -i] , 1) );
```


+j1
+j0.5
+j2
+j0.2
+j5
0.0
0.2
0.5
1
2
5
30
+j30
∞
-j30
-j0.2
-j5
-j0.5
-j2
-j1


+j1
+j0.5
+j2
+j0.2
+j5
0.0
0.2
0.5
1
2
5
30
+j30
∞
-j30
-j0.2
-j5
-j0.5
-j2
-j1



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