

```

clear
clc

K = 0.05; %Reaction's equilibrium constant.
pt = 3; %Total Pressure.

f = @(x) ((x/(1-x))*sqrt((2*pt)/(2+x)))- K; %The Function.

Plot = fplot (f); %Plot the function.

```

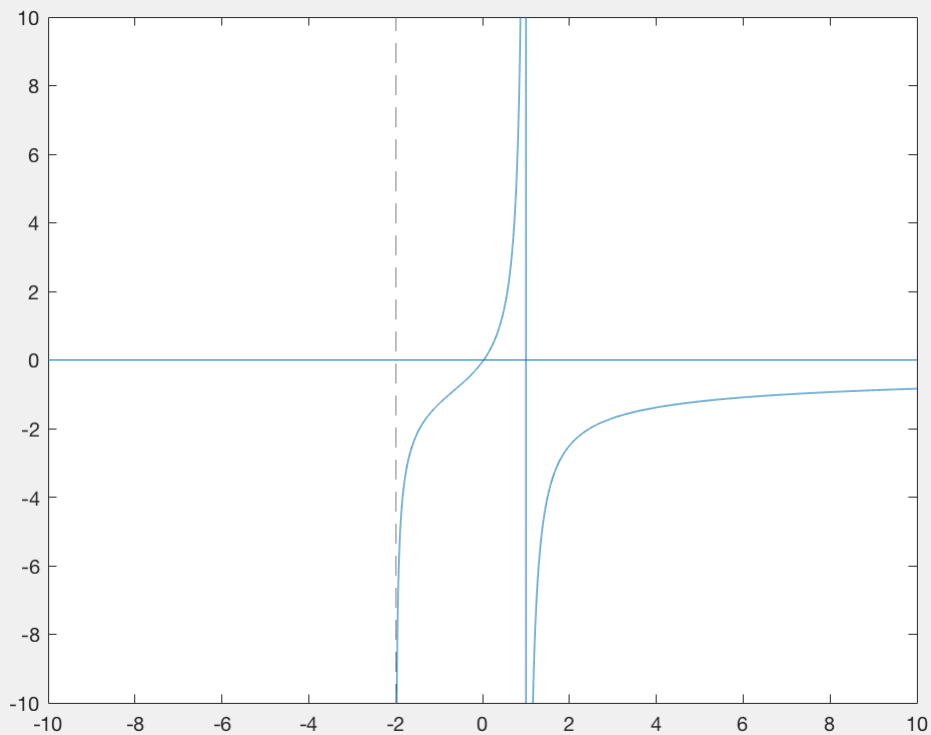
Warning: Function behaves unexpectedly on array inputs. To improve performance, properly vectorize your function to return an output with the same size and shape as the input arguments.

```

xlim([-10 10]); %Restrict Domain
ylim([-10,10]); %Restrict Range
refline(0,0); %Put a zero refrence line

[Guess,output] = getpts;

```



```

if length(Guess) > 1
    error('you picked more than one guess, pick only one.Restart the code.');
```

end

%This code will use the function getpts and then display the graph for you.
 %All you have to do is pick a point of initial guess on the graph.

```
%Double click on the guess point juest once, don't pick two guesses.  
%Error will show if more than two points are.
```

```
Sloution1 = fzero(f,Guess)
```

```
Sloution1 = 0.0282
```

```
%Use fzero function in matlab to estimate the root with initial guess of  
%0.5.
```

```
Sloution2 = fsolve(f,Guess)
```

```
Equation solved.
```

```
fsolve completed because the vector of function values is near zero  
as measured by the default value of the function tolerance, and  
the problem appears regular as measured by the gradient.
```

```
<stopping criteria details>  
Sloution2 = 0.0282
```

```
%Another way: solve the function for using function solving.
```